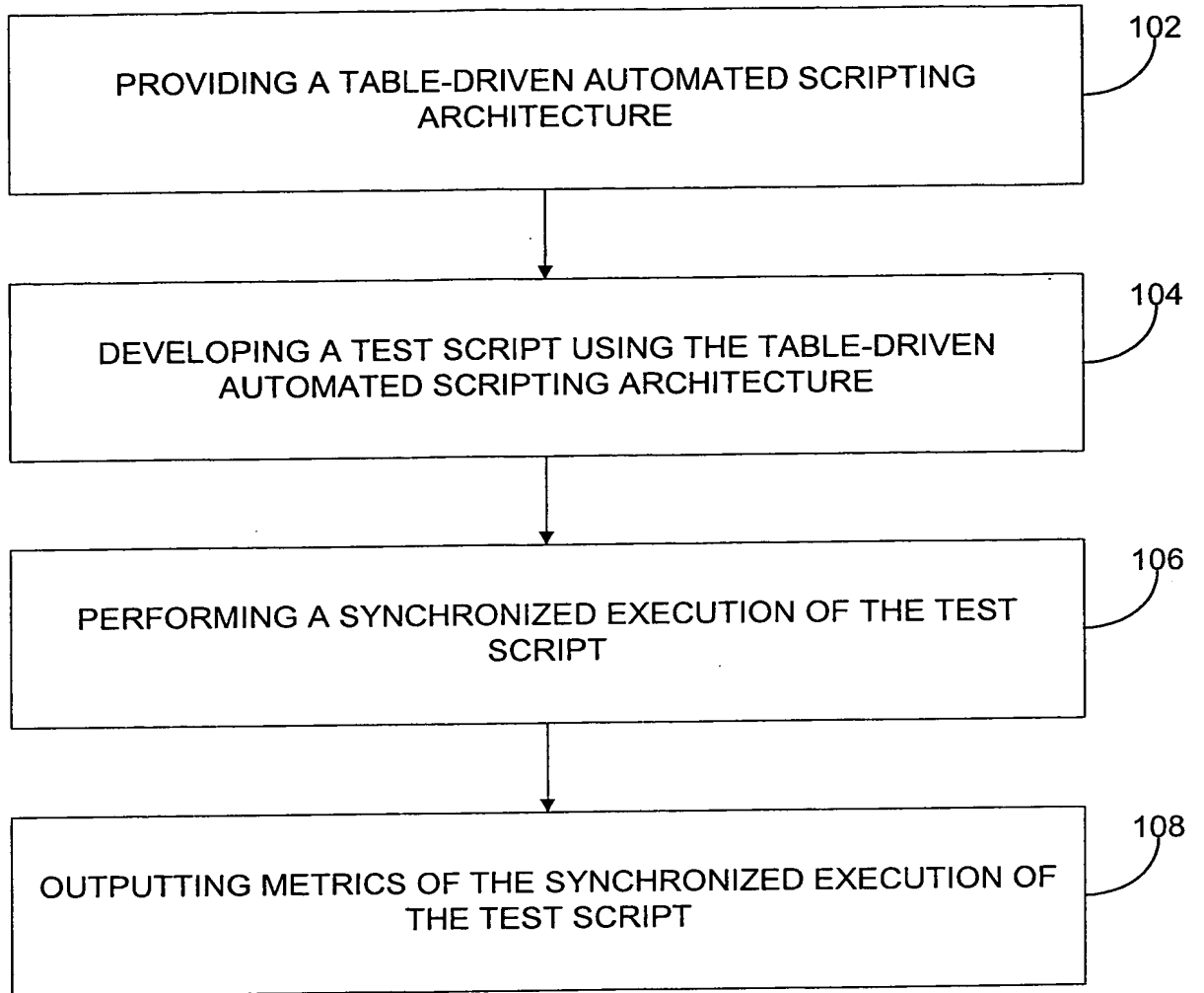
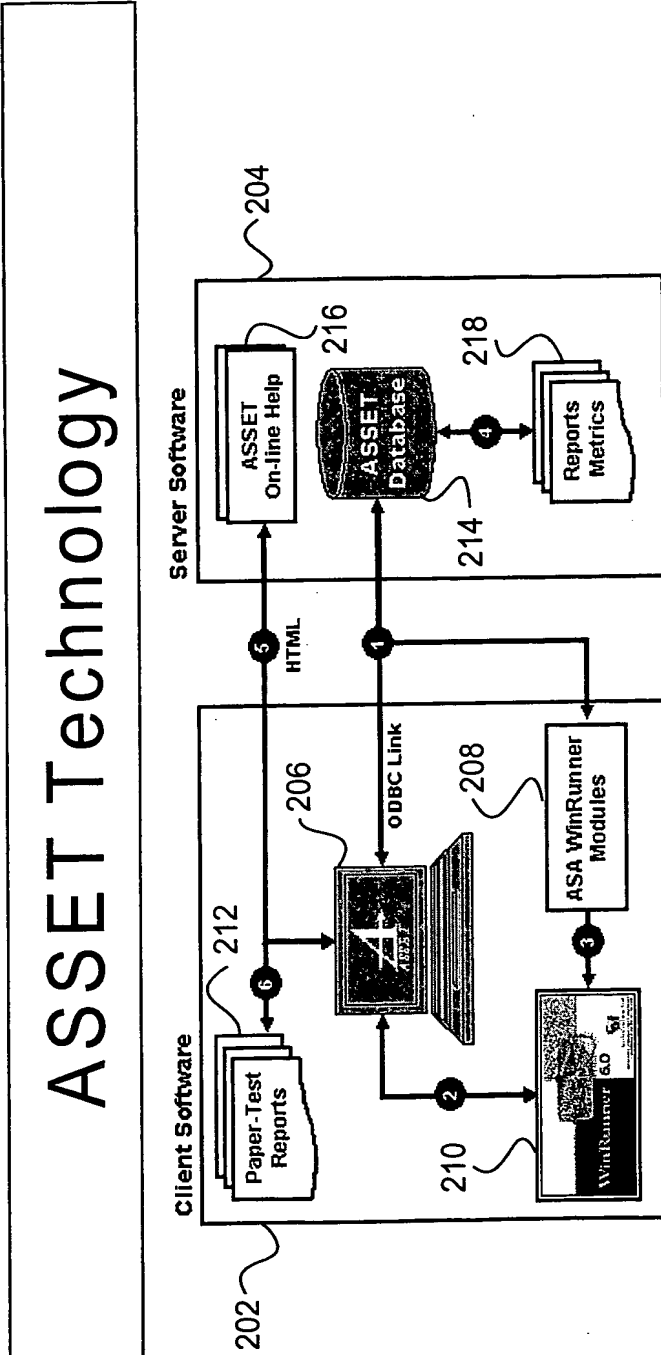


100



### Figure 1

200



1	Updates to Test Script Data via an ODBC link between the ASSET client and server software. Test script data is passed to ASA modules via SQL query.
2	Mercury Interactive's WinRunner™ is connected to the host application on the client workstation, and is used to automate test script data processed by ASA module.
3	Custom ASA module processes data for each test script step stored in ASSET database.
4	HTML test cycle execution reports are stored on server
5	HTML on-line ASSET help documentation is centralized on server
6	ASSET test script data is dynamically converted into <i>english-based</i> , test script documentation

FIG. 2



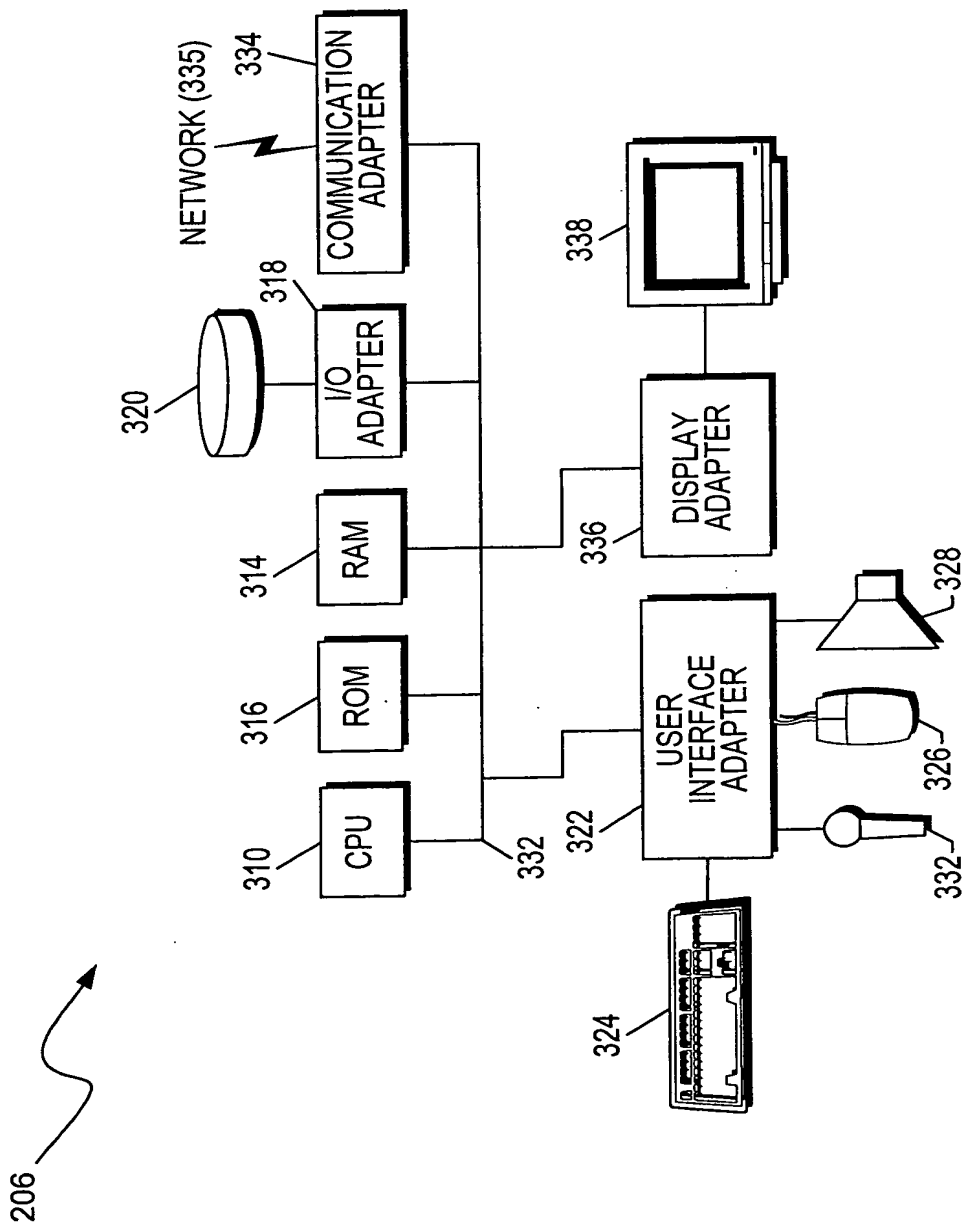
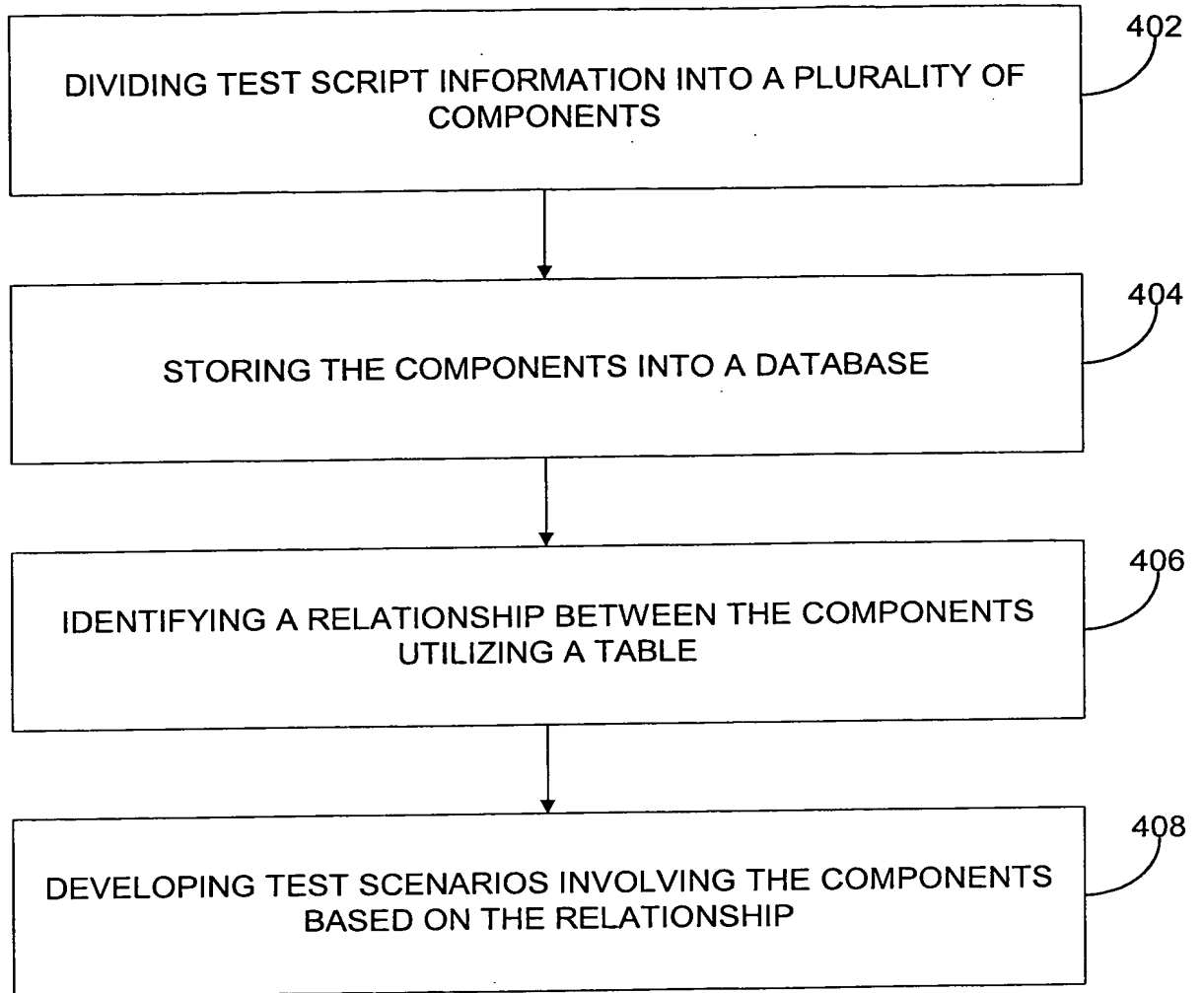


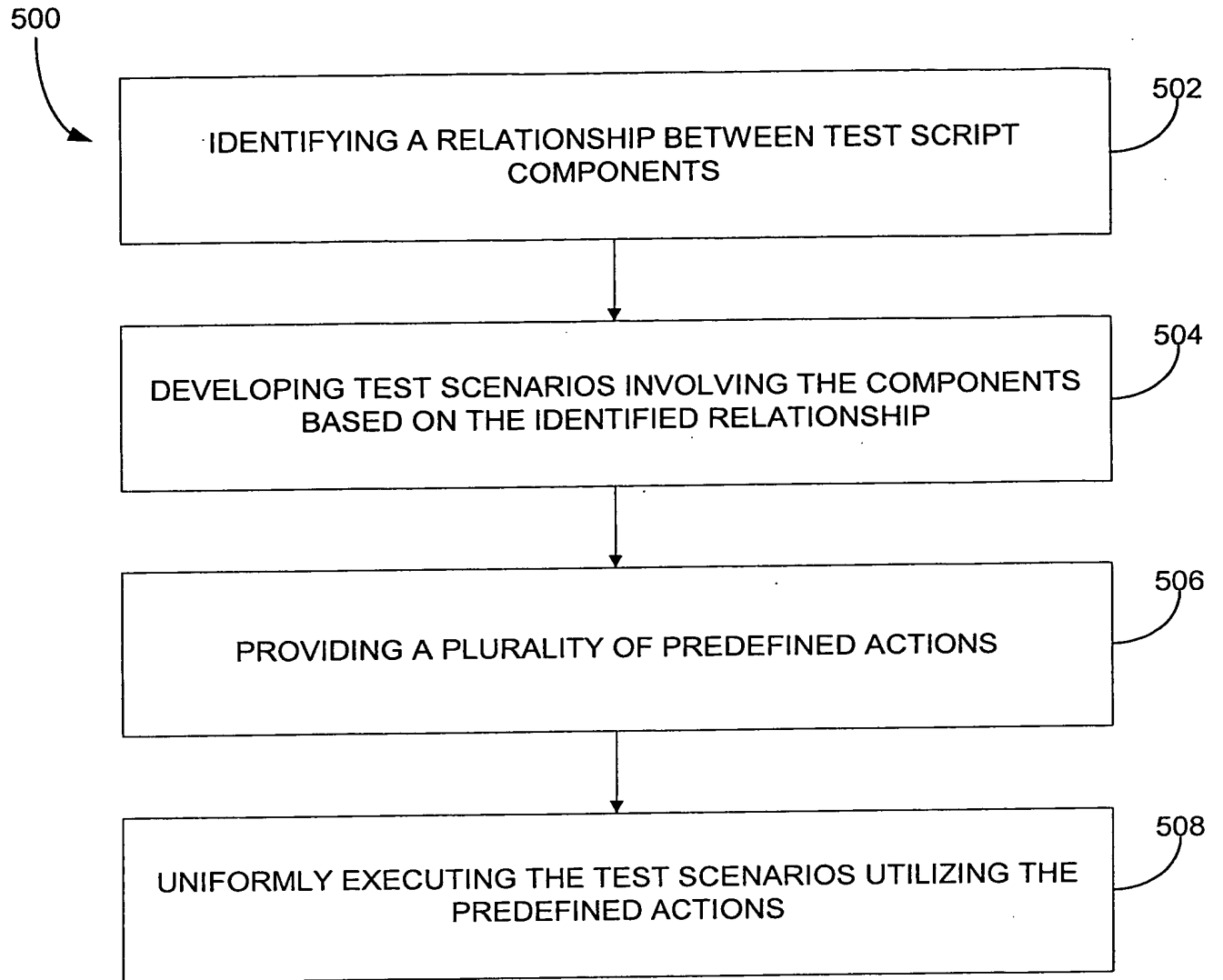
Figure 3

400



### Figure 4

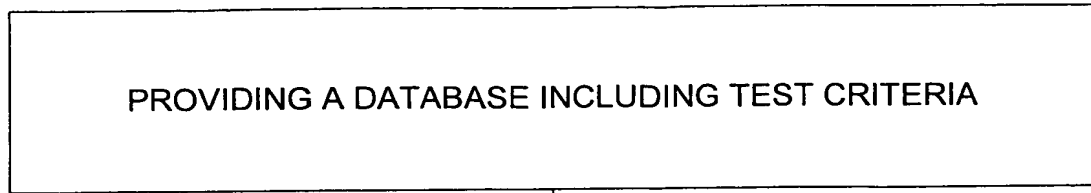
002220" 6289E560



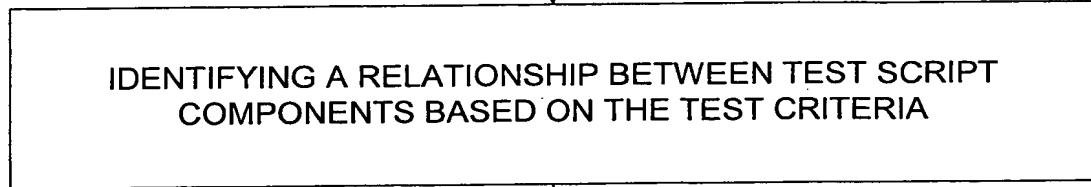
**Figure 5**

002220" 6289560

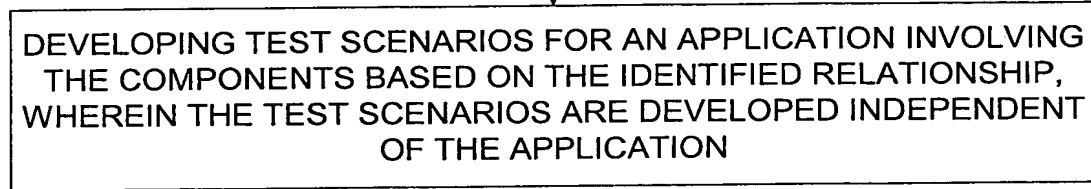
600



602



604



606

**Figure 6**

700



704

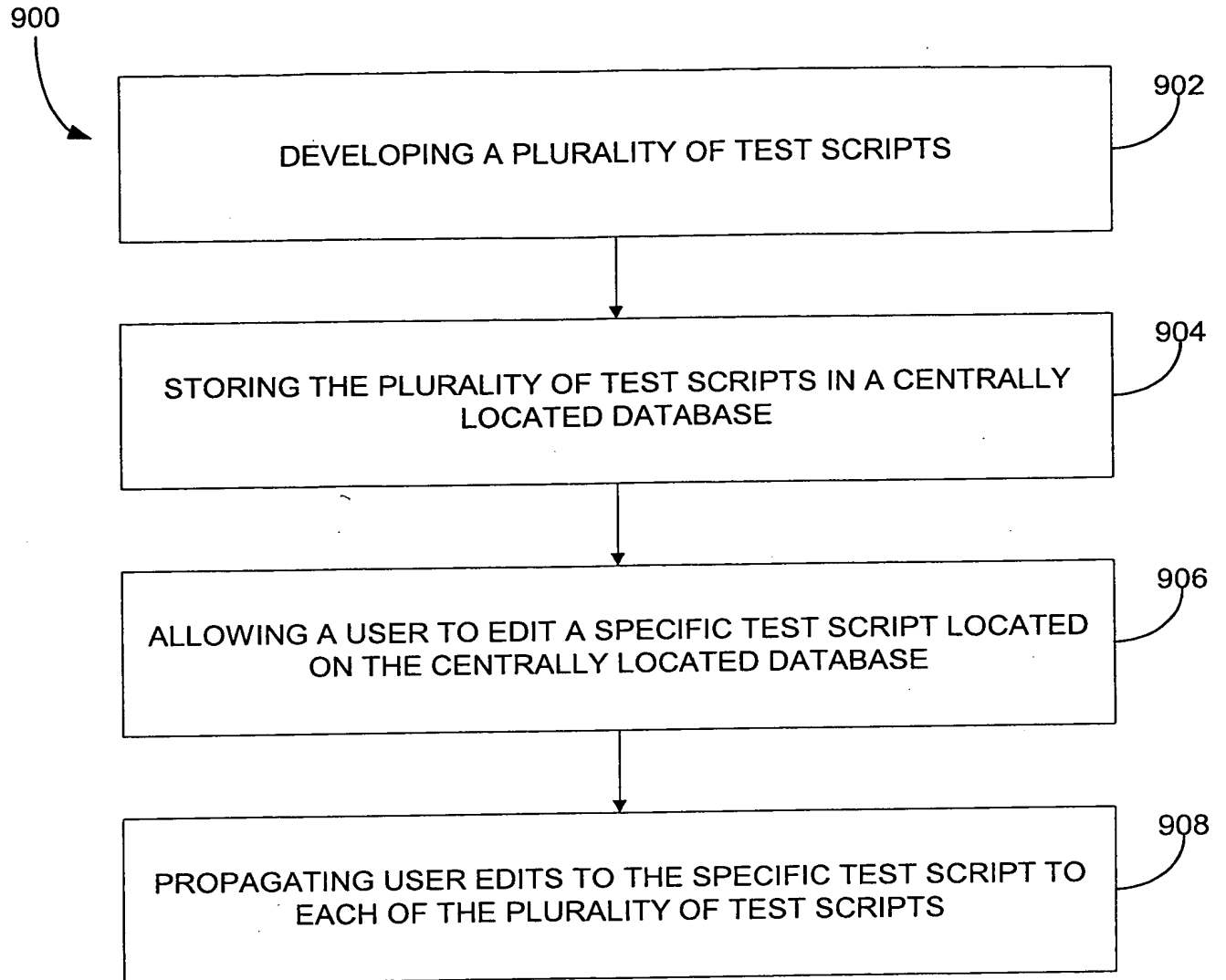
706

708





**SECRET**



### Figure 9

**007-0950**



### Figure 10

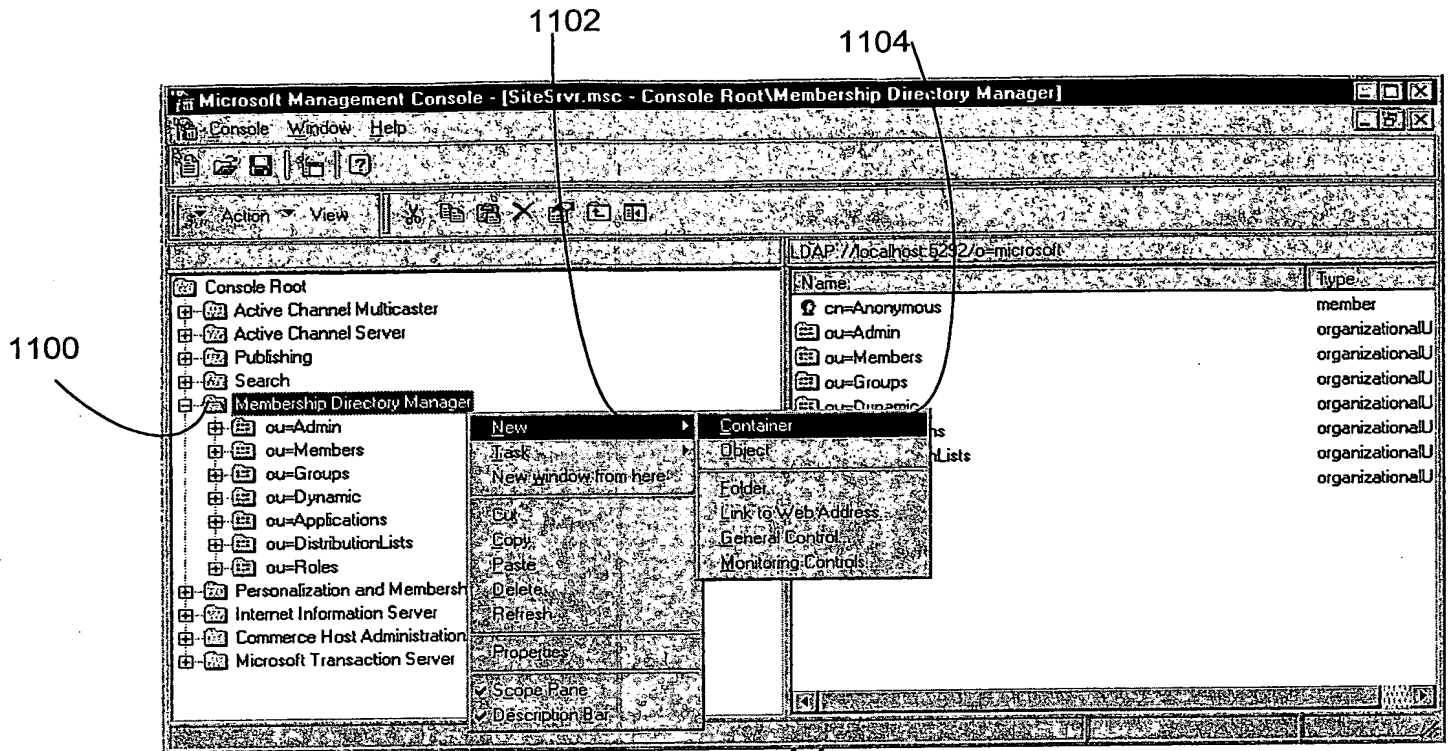
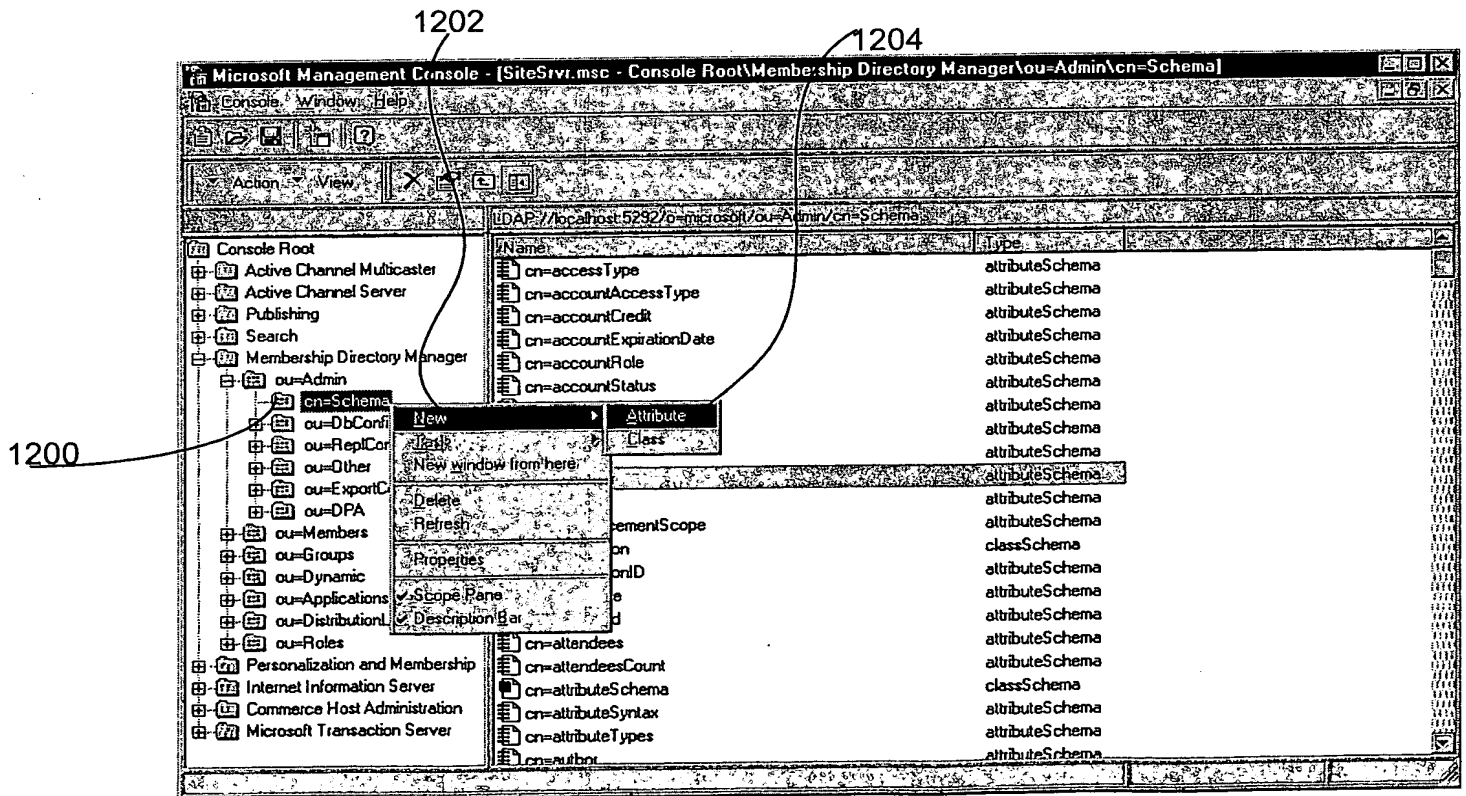
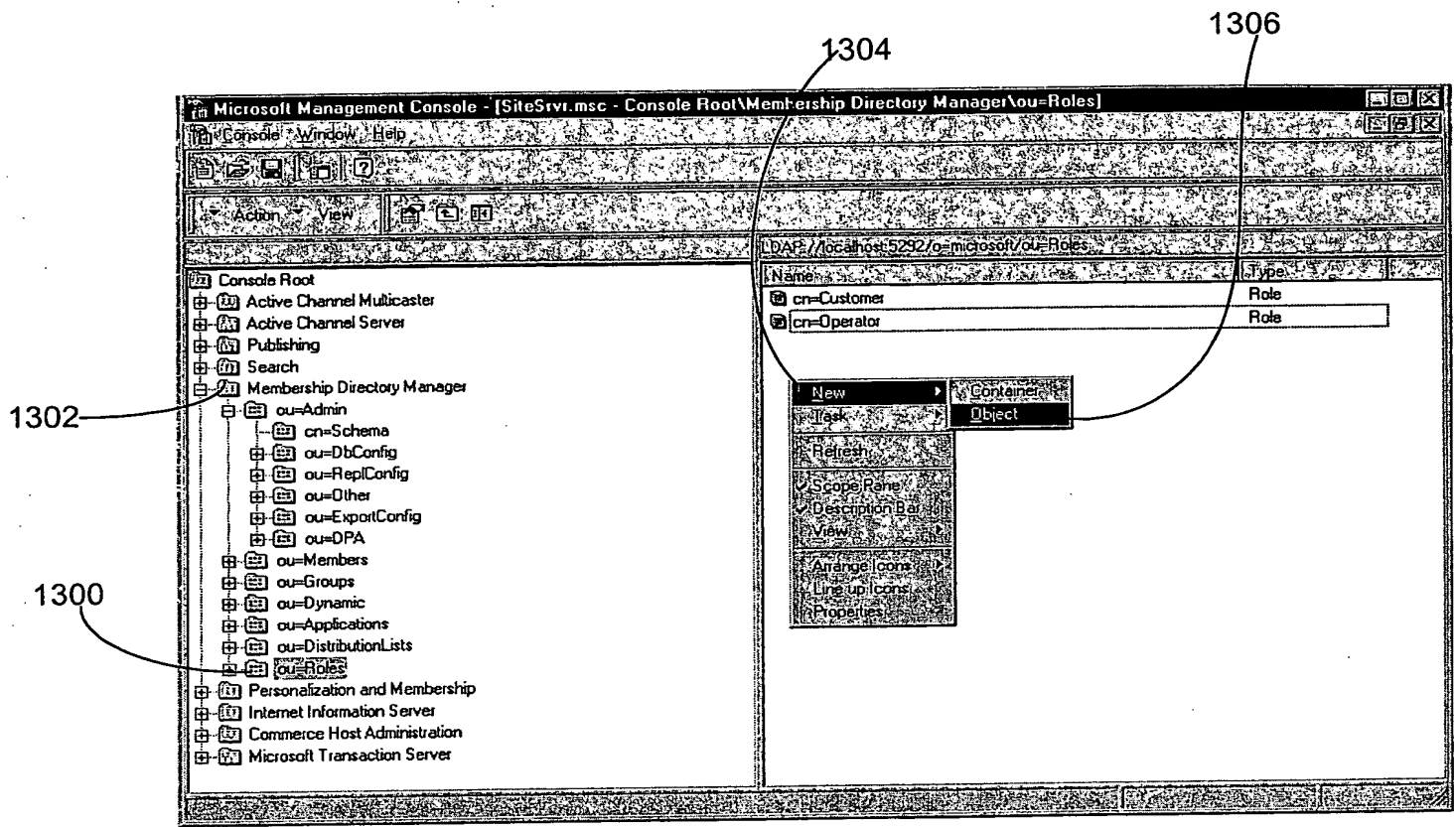
[illegible]

Figure 11



### Figure 12

[illegible]

### Figure 13

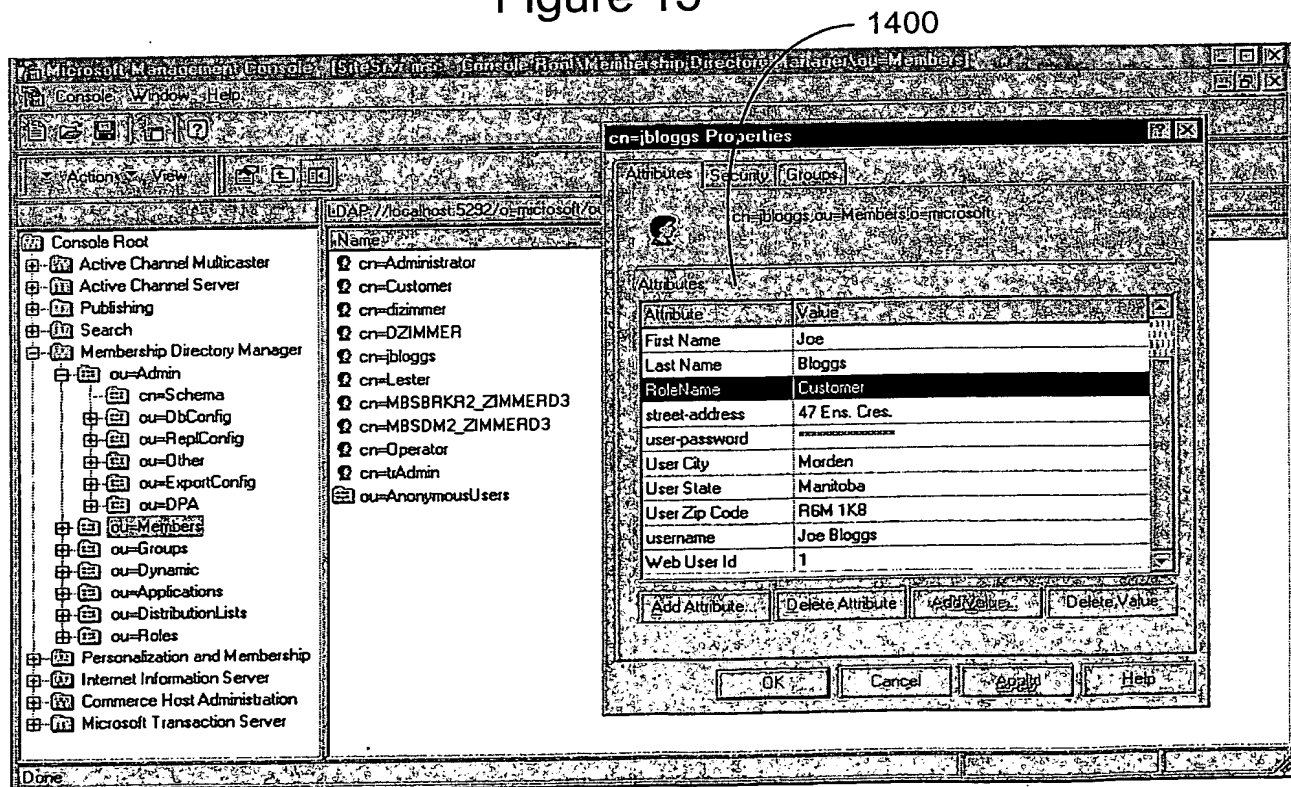


Figure 14

004220" 6489560

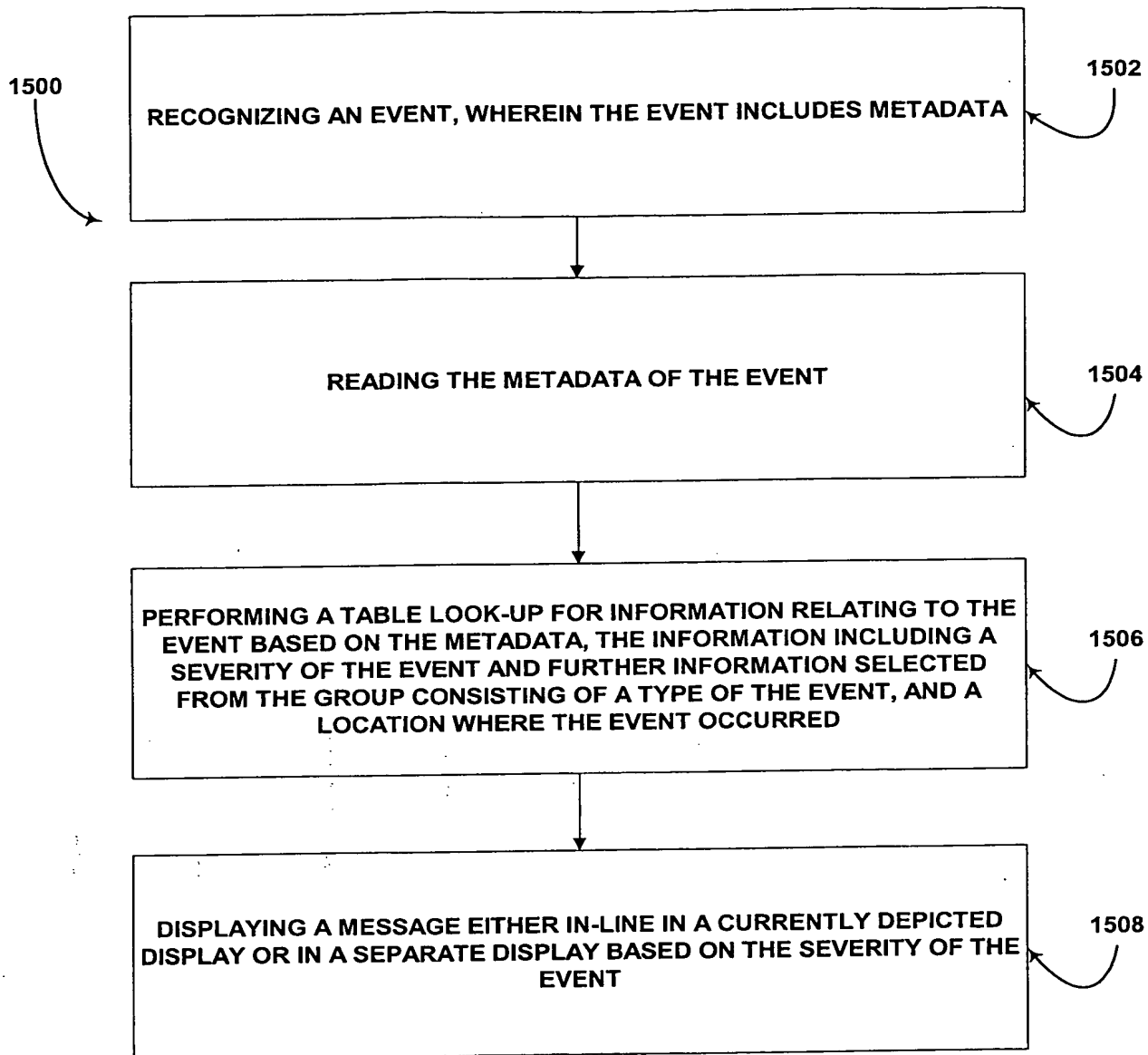


Figure 15

00220" 6489E560

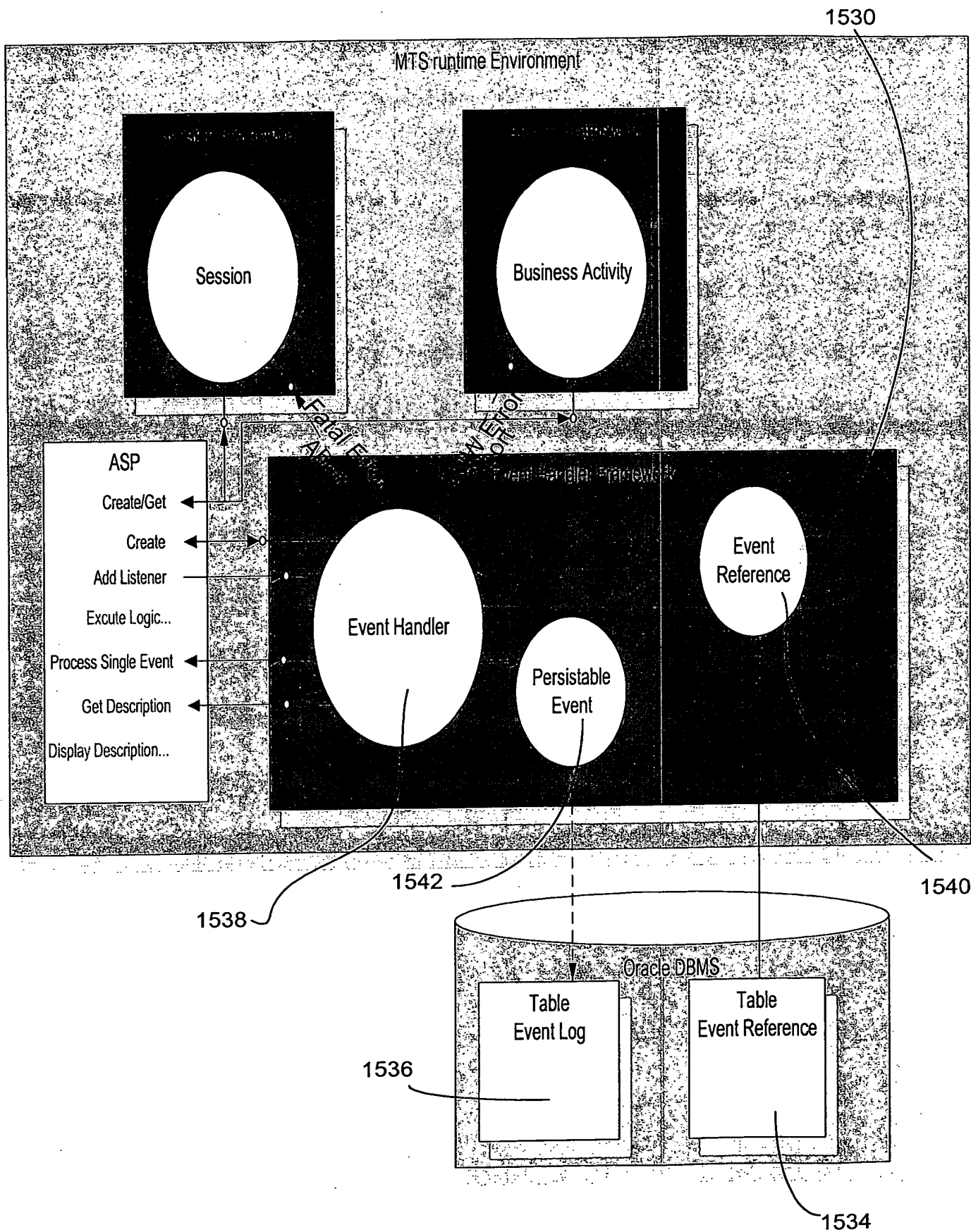


Figure 15.1

```
graph TD; 1600 --> 1602; 1602 --> 1604; 1604 --> 1606; 1606 --> 1608; 1608 --> 1610; 1610 --> 1612;
```

**1600** PROVIDING A SITE SERVER WITH INFORMATION STORED THEREON INCLUDING PREFERENCES, ROLES, AND DETAILS RELATING TO USERS

**1602** PROVIDING A DATABASE SEPARATE FROM THE SITE SERVER, THE DATABASE HAVING INFORMATION STORED THEREON INCLUDING PREFERENCES, ROLES, AND DETAILS RELATING TO THE USERS

**1604** AUTHENTICATING AN IDENTITY OF ONE OF THE USERS

**1606** DISPLAYING A SINGLE INTERFACE WHICH PROVIDES THE USER ACCESS TO BOTH THE SITE SERVER AND THE DATABASE UPON AUTHENTICATION OF THE IDENTITY OF THE USER

**1608** ALLOWING THE USER TO VIEW AND CHANGE THE INFORMATION THAT IS STORED ON THE SITE SERVER AND THE DATABASE AND THAT IS ASSOCIATED WITH THE USER

**1610** TAILORING THE SINGLE INTERFACE BASED ON THE INFORMATION ASSOCIATED WITH THE USER

**1612**

Figure 16

00/220" 6289E560

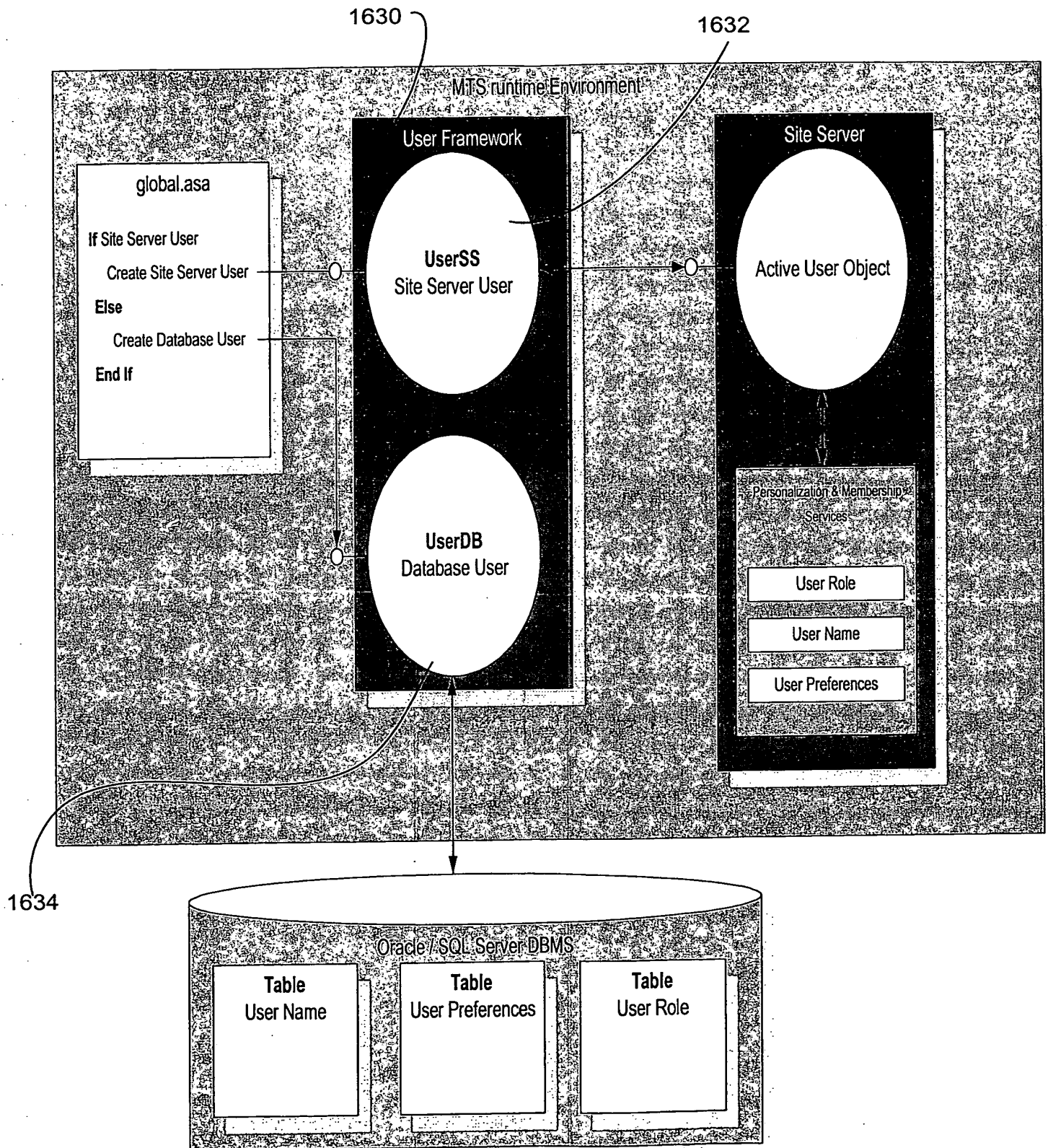


Figure 16.1





00220" 6489E560

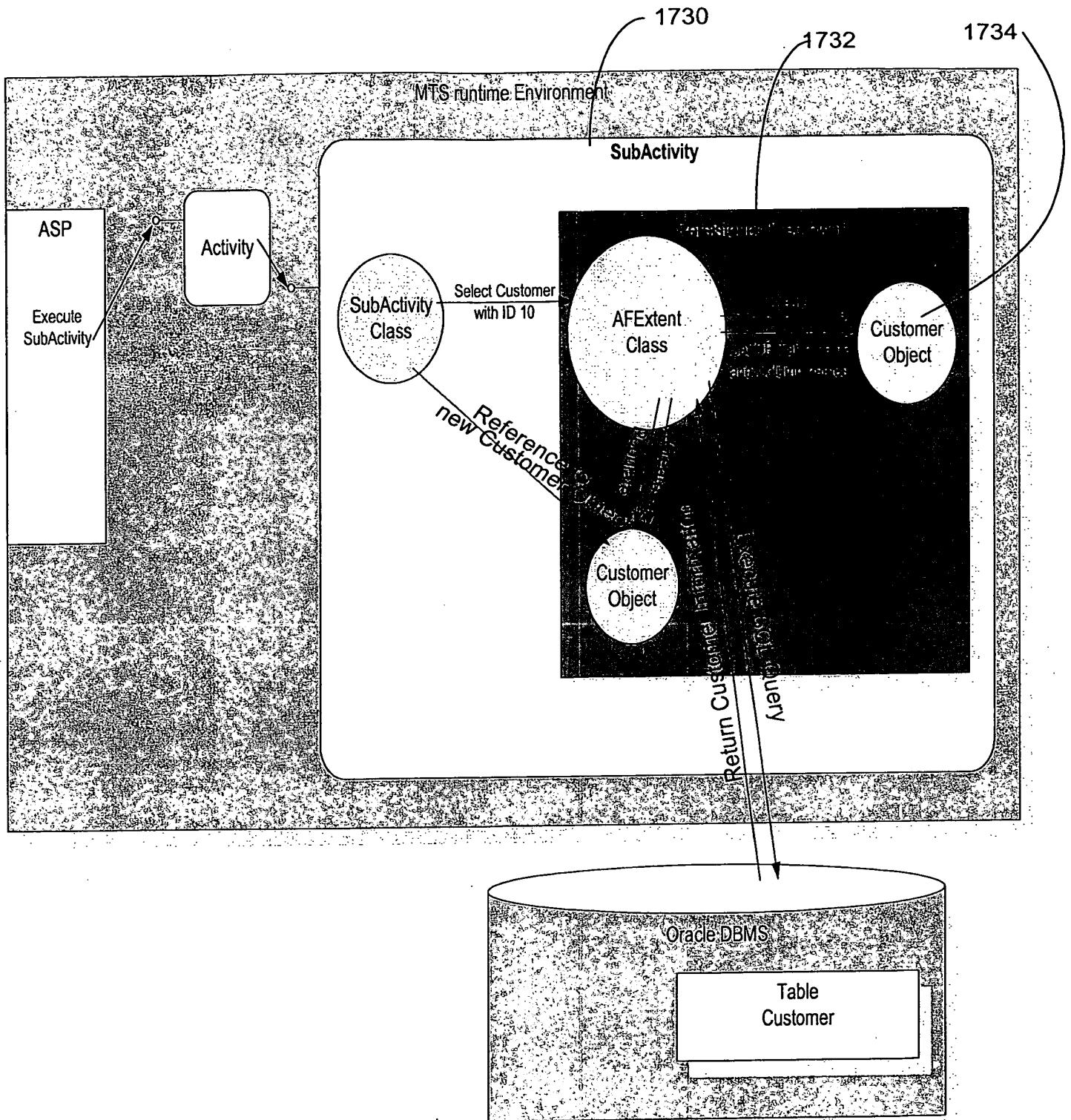


Figure 17.1

```

graph TD
    1800 --> 1802
    1802 --> 1804
    1804 --> 1806
    1806 --> 1808
    1808 --> 1810

```

**1800 INITIATING A SESSION UPON A USER ACCESSING A PREDETERMINED STARTING PAGE**

**1802 TRACKING A CURRENT PAGE ACCESSSED BY THE USER WHILE BROWSING A PLURALITY OF PAGES DURING THE SESSION**

**1804 MAINTAINING A RECORD OF A PAGE PREVIOUSLY ACCESSSED BY THE USER DURING THE SESSION**

**1806 PERSISTING INFORMATION SELECTED FROM THE GROUP CONSISTING OF A USER IDENTIFIER, A TIME OF A MOST RECENT USER ACTION DURING THE SESSION, ACTIVITY COMPONENTS ACCESSSED DURING THE SESSION, AND BUSINESS COMPONENTS ACCESSSED DURING THE SESSION**

**1808 PROVIDING THE CURRENT PAGE, PREVIOUS PAGE RECORD, AND INFORMATION TO AT LEAST ONE ACTIVITY COMPONENT DURING THE SESSION, WHEREIN THE ACTIVITY COMPONENT GENERATES OUTPUT BASED ON INPUT PROVIDED BY THE USER VIA THE PLURALITY OF PAGES**

Figure 18

Figure 18 illustrates the high-level architecture of the MTS runtime environment. The environment (1800) is composed of several key components:

- Global ASA (1802):** The Global Activity Scheduler Agent, responsible for creating and managing sessions and users.
- Session Framework (1804):** The core framework for managing sessions and tracking activity. It includes:
  - Session (1810):** A container for a single user's activity.
  - Tracking Manager (1806):** Manages the session and tracks activity, interacting with the User Framework and the DBMS.
- User Framework (1808):** Contains the **UserDB / UserSS (1808)**, which stores user-related data.
- Activity Tracking Components:** The Tracking Manager manages four specific activity components:
  - Destination for Action (1808):** The target of a user's action.
  - Authorized Source Page (1806):** The page from which the action was initiated.
  - Authorized Destination Page (1806):** The page that the user is authorized to access.
  - Pages of Activity (1806):** The pages that the user has visited during the session.
- Database (1806):** An Oracle/SQL Server DBMS that stores the data for the activity tracking components in tables:
  - Table Destination for Action**
  - Table Authorized Source Page**
  - Table Authorized Destination Page**
  - Table Pages of Activity**

Arrows indicate the flow of data and control between these components, showing how the Global ASA manages sessions, how the Tracking Manager tracks activity, and how this data is stored in the database.

Figure 18.1

002250"62895560

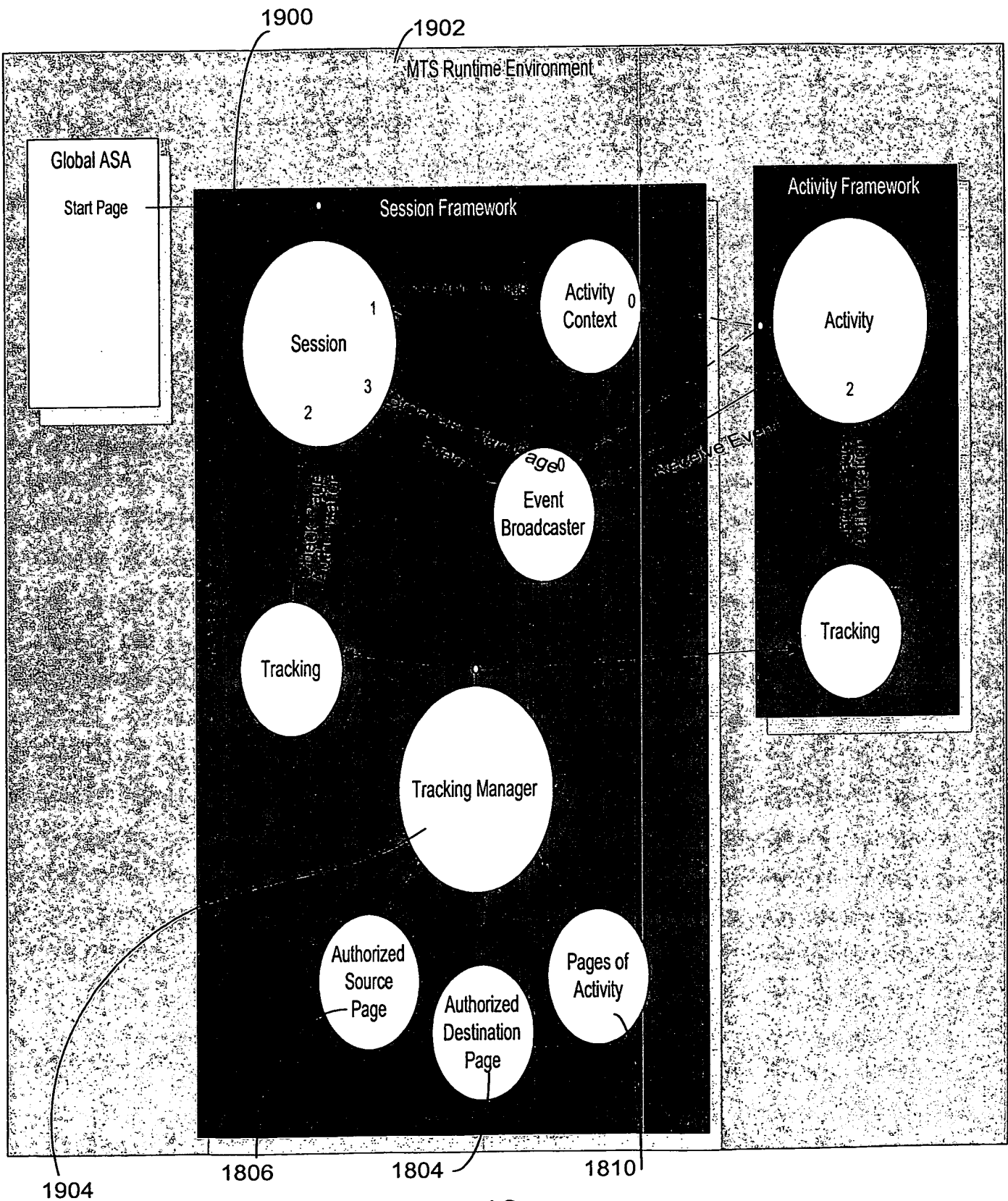


Figure 19

2000

2002

2004

2006

2008

### Figure 20

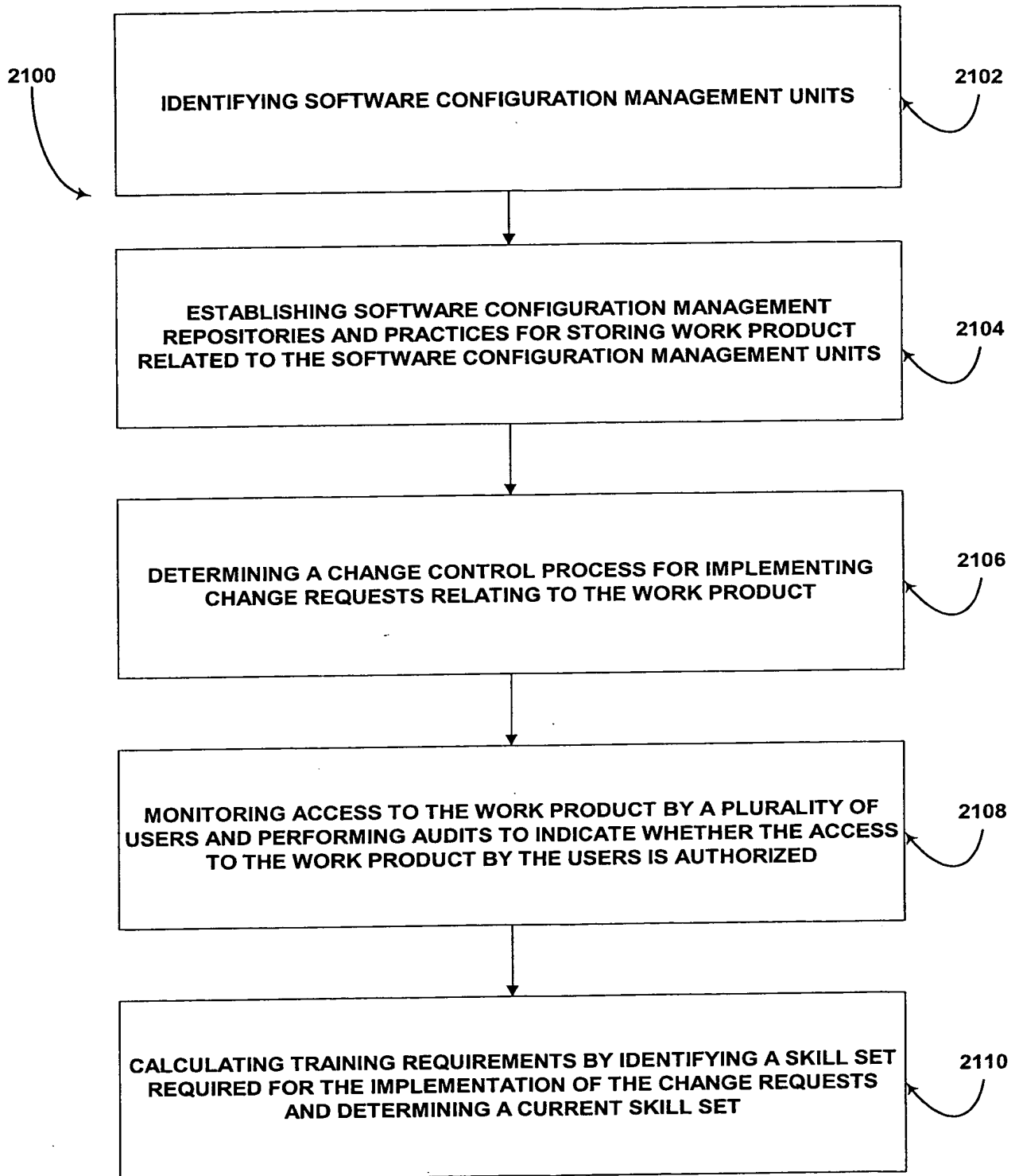


Figure 21

09536879.032700

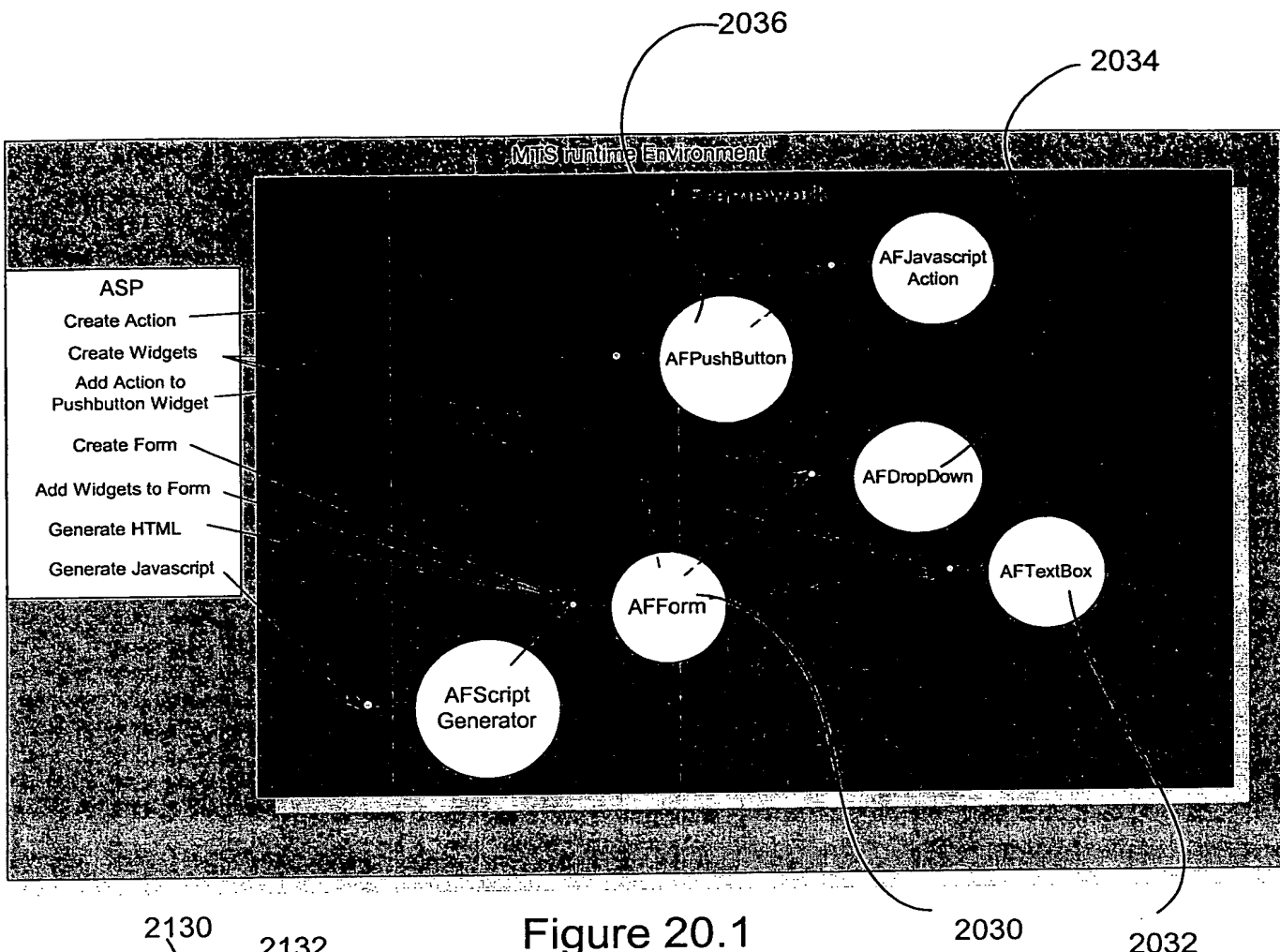


Figure 20.1

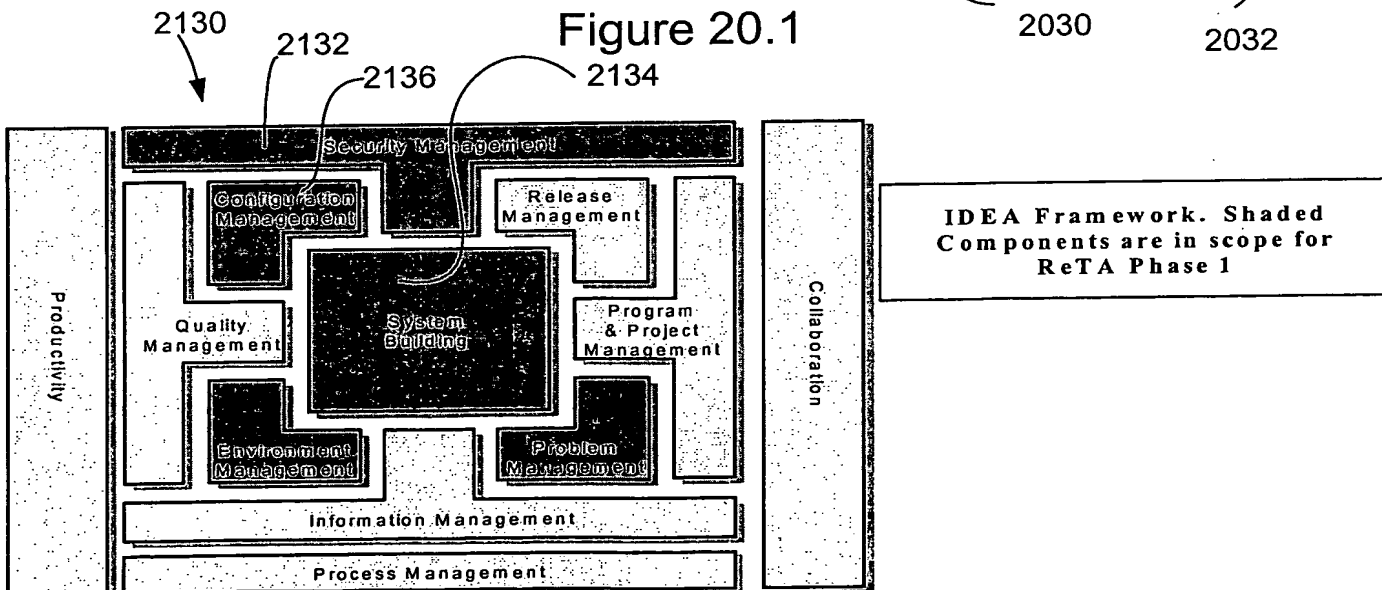


Figure 21.1





00/220" 6/895560

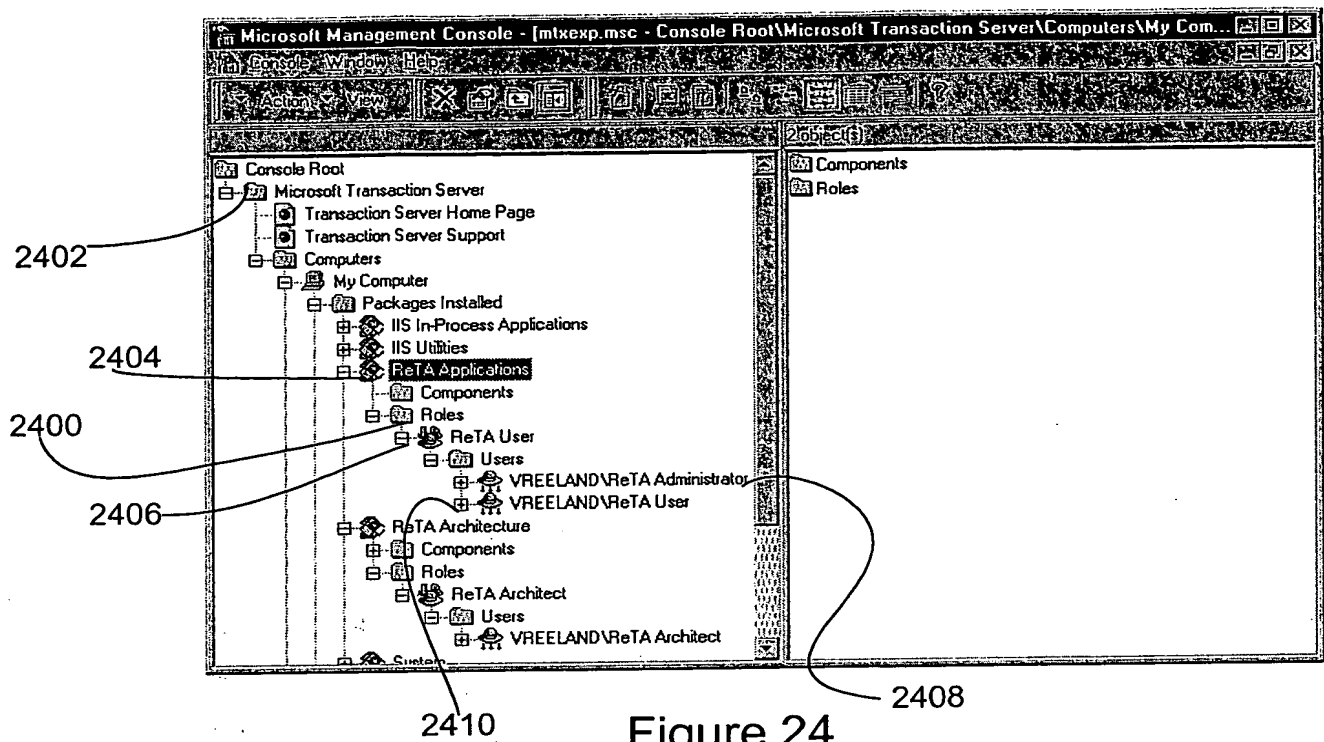


Figure 24

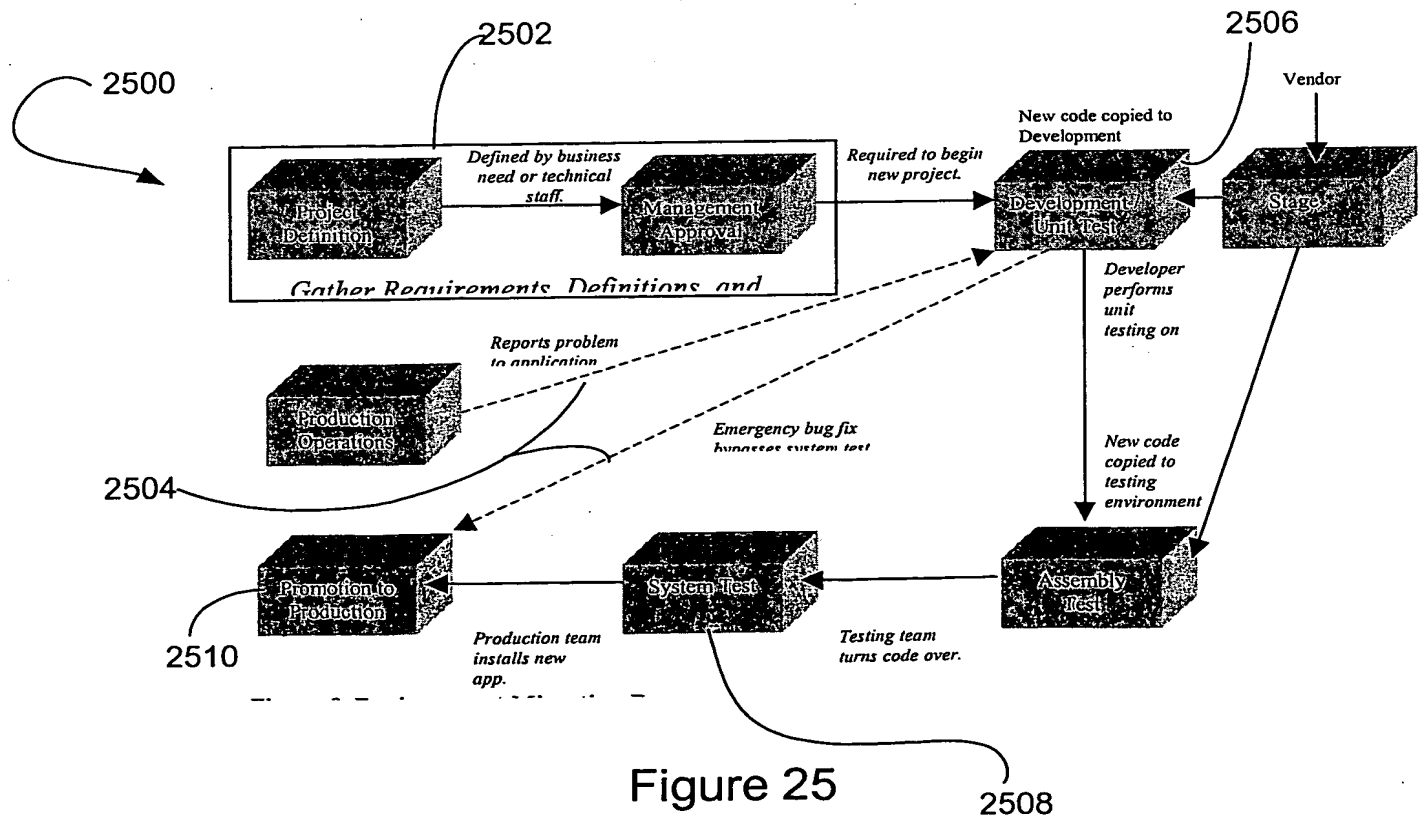


Figure 25



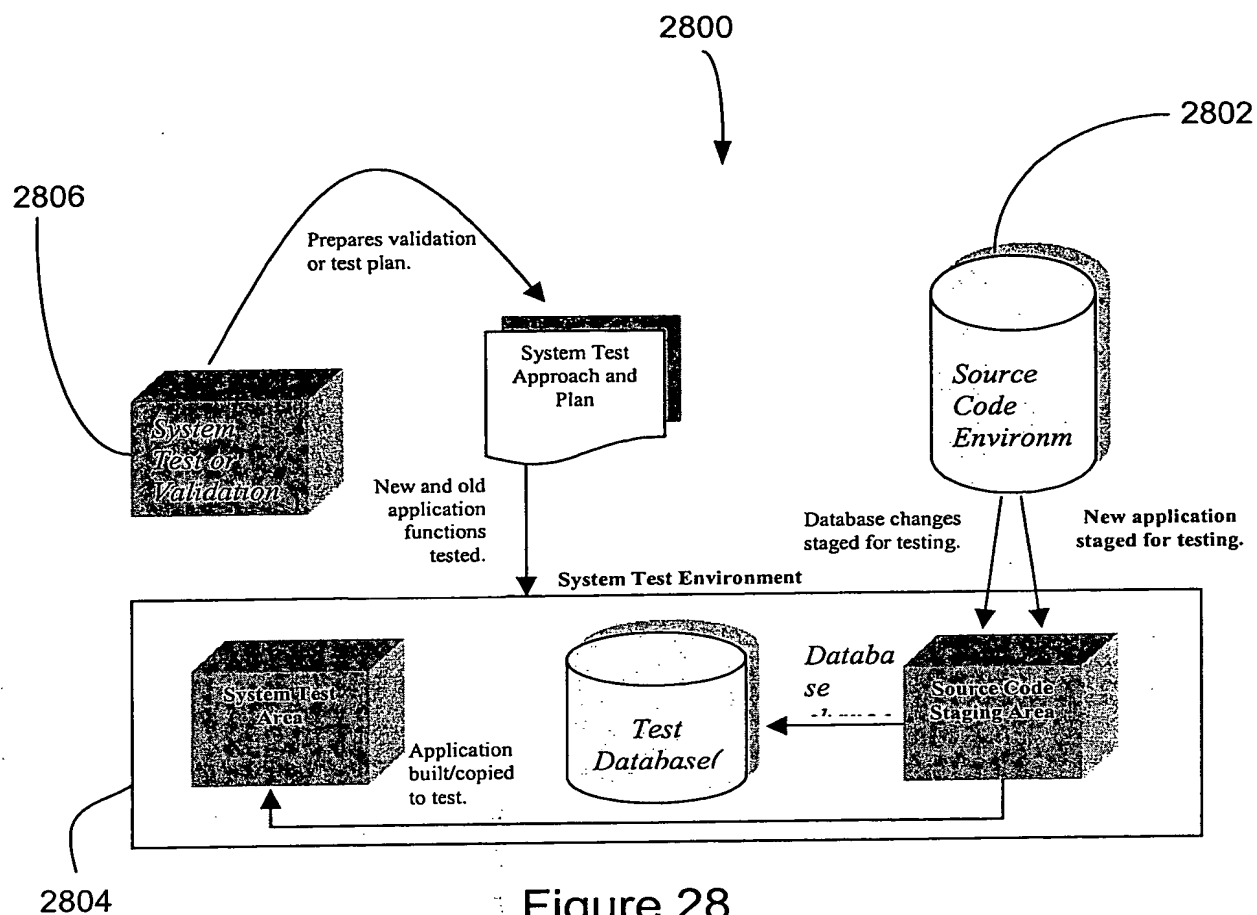


Figure 28

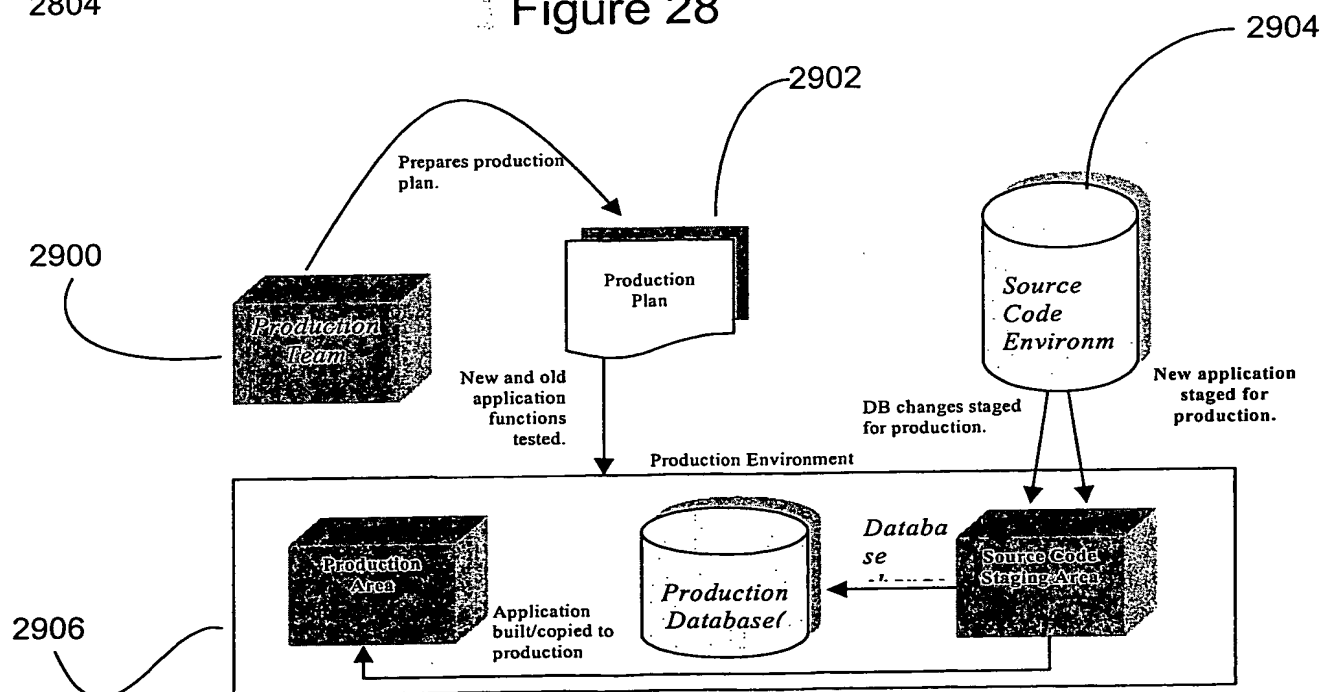
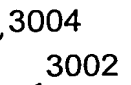


Figure 29

055697



3100

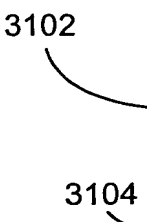


Figure 31

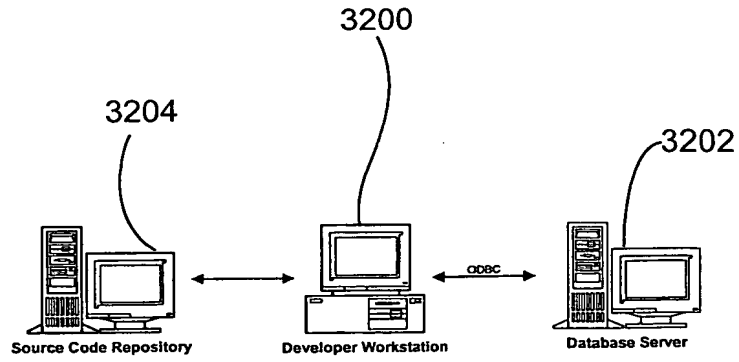


Figure 32

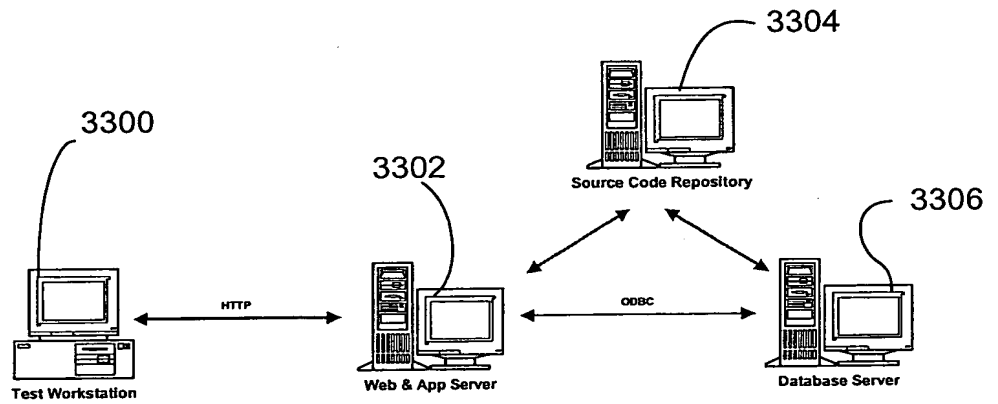


Figure 33

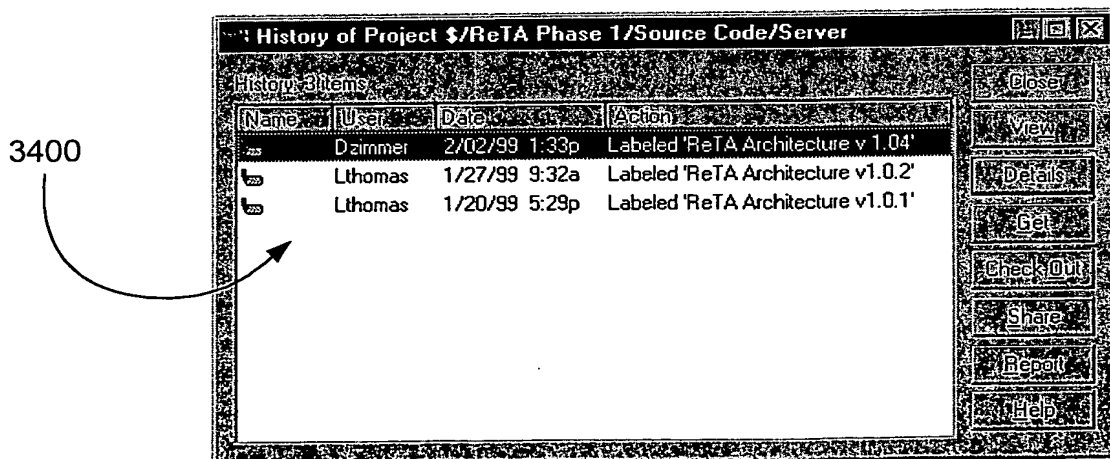


Figure 34

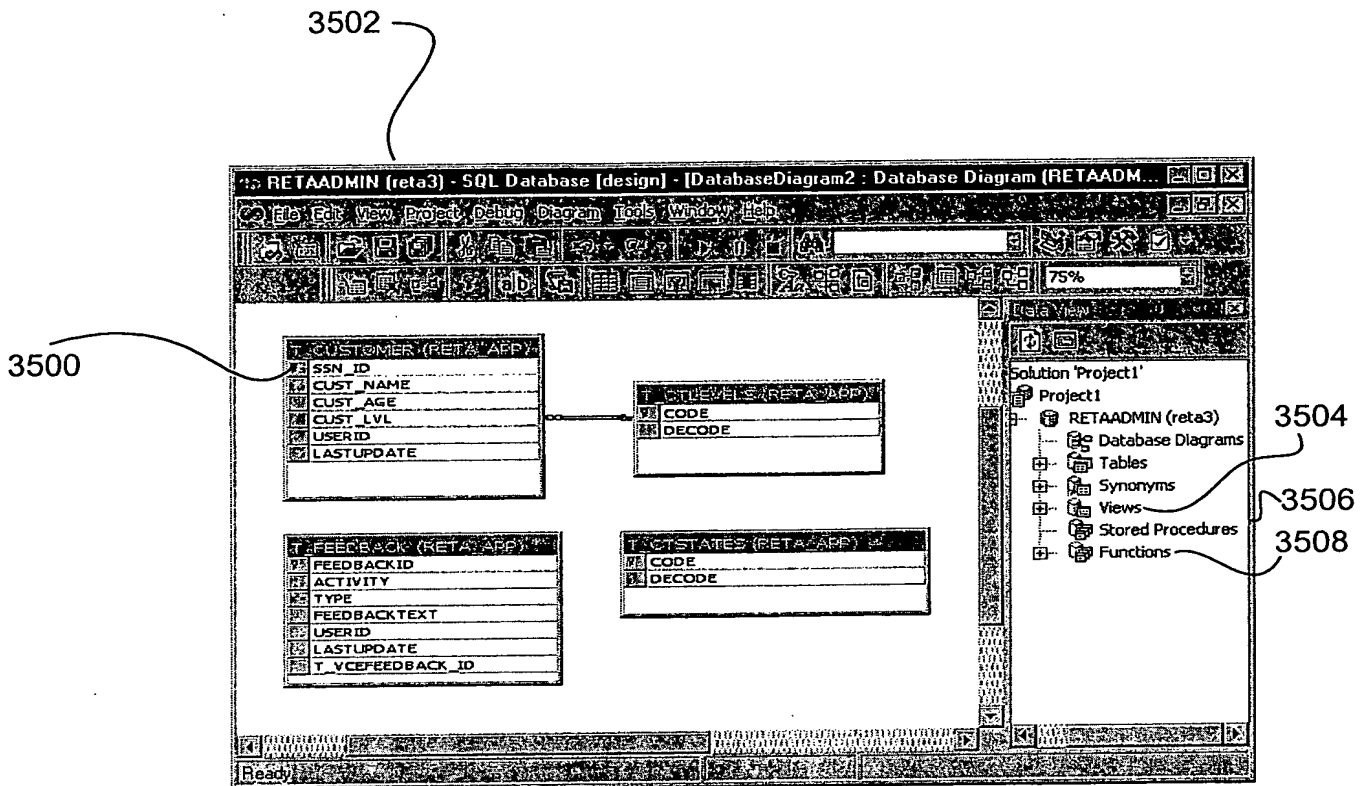


Figure 35

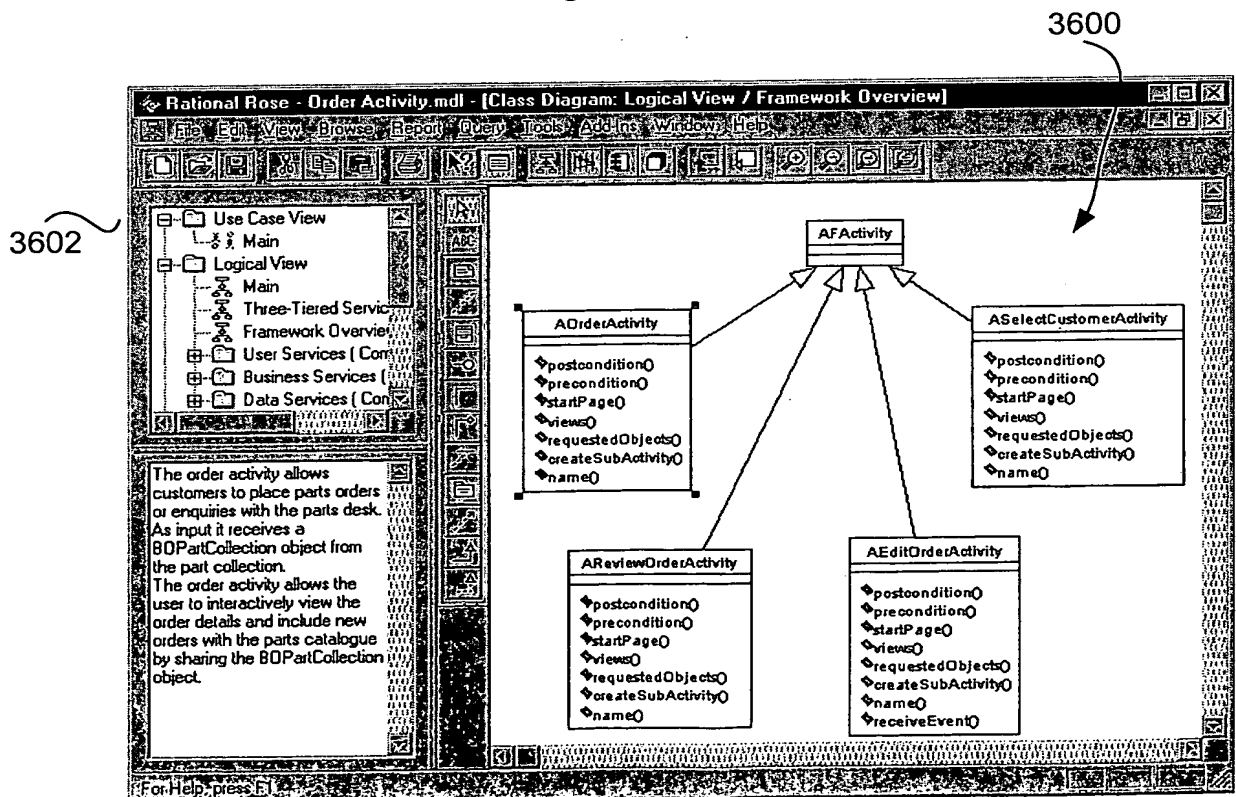


Figure 36

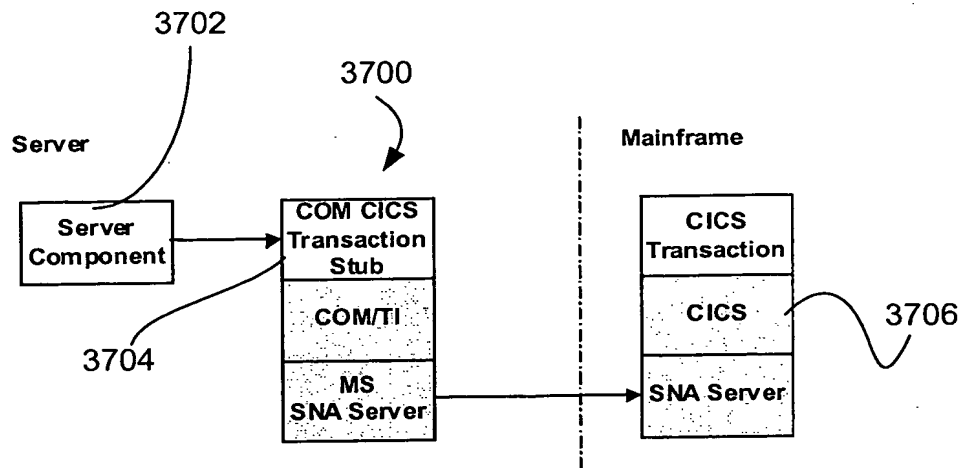


Figure 37

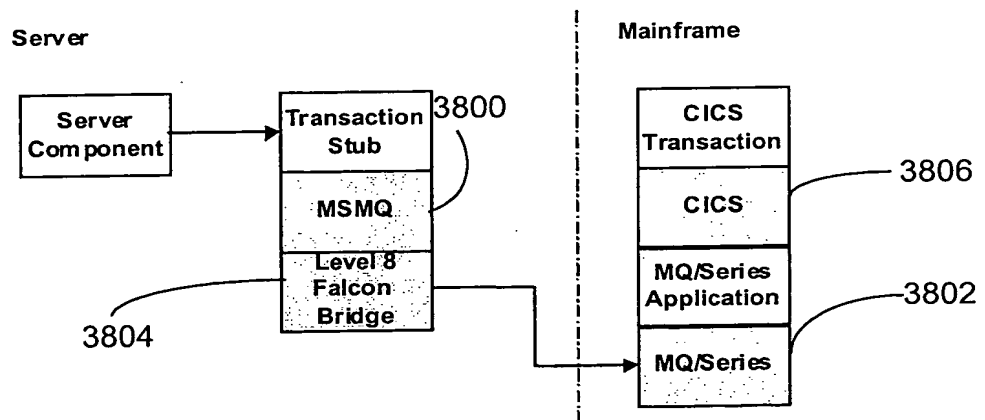


Figure 38



3900

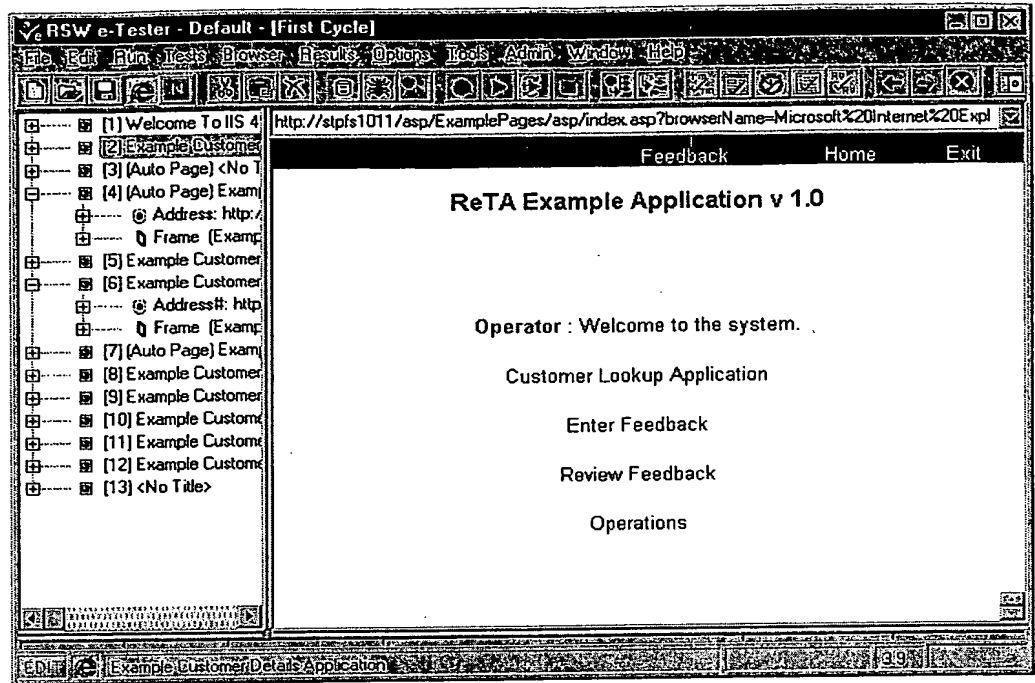


Figure 39

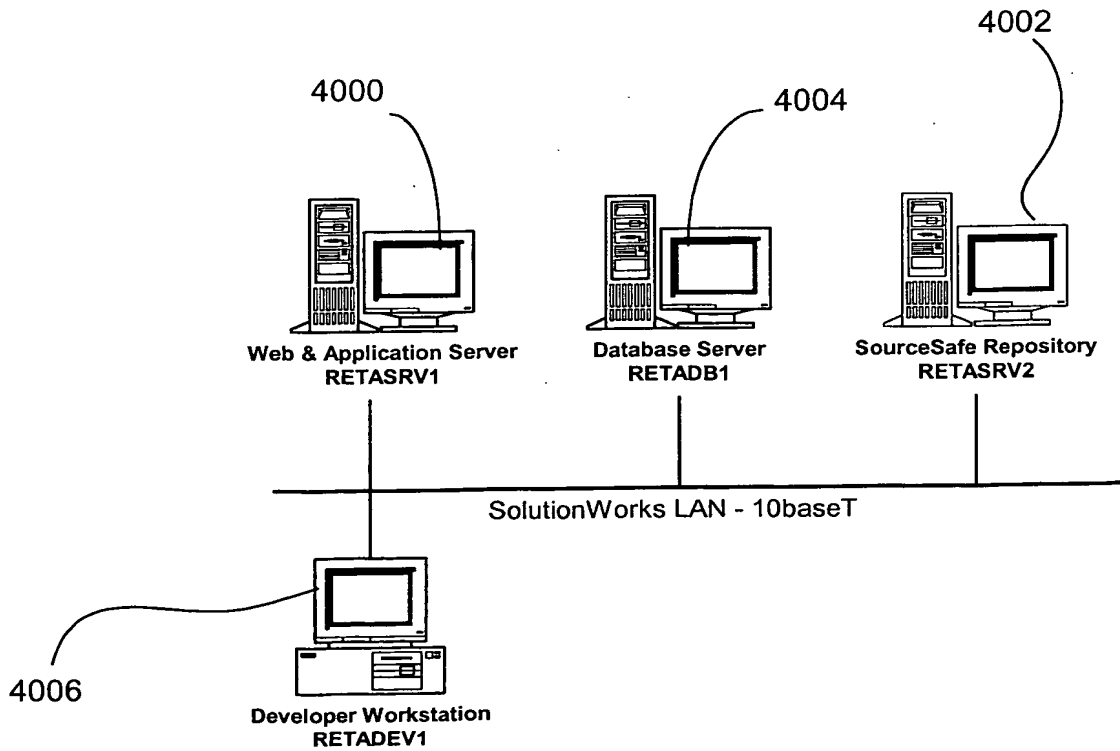


Figure 40

002220"6289E560

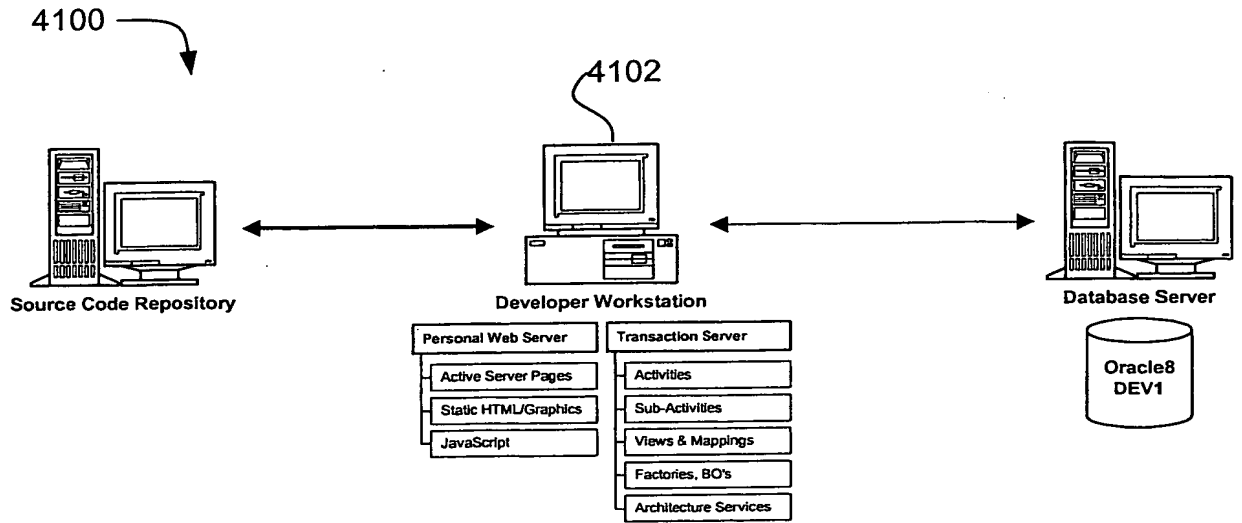


Figure 41

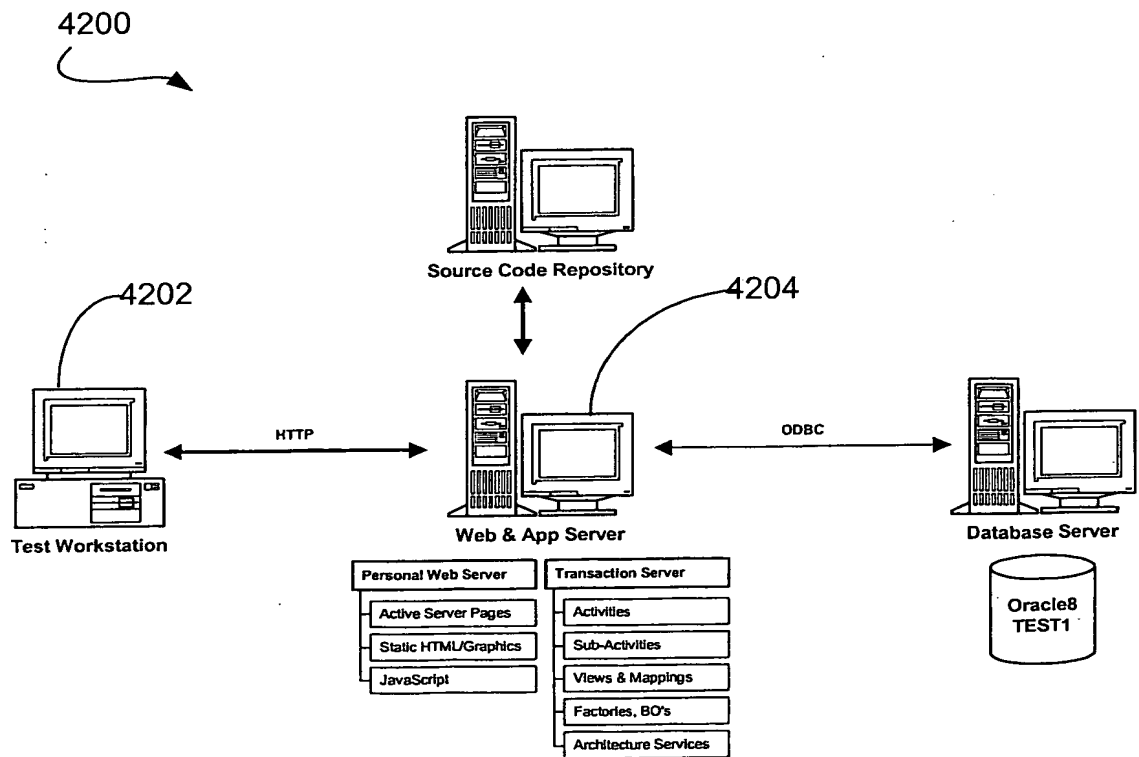


Figure 42

09536879.022700

4300

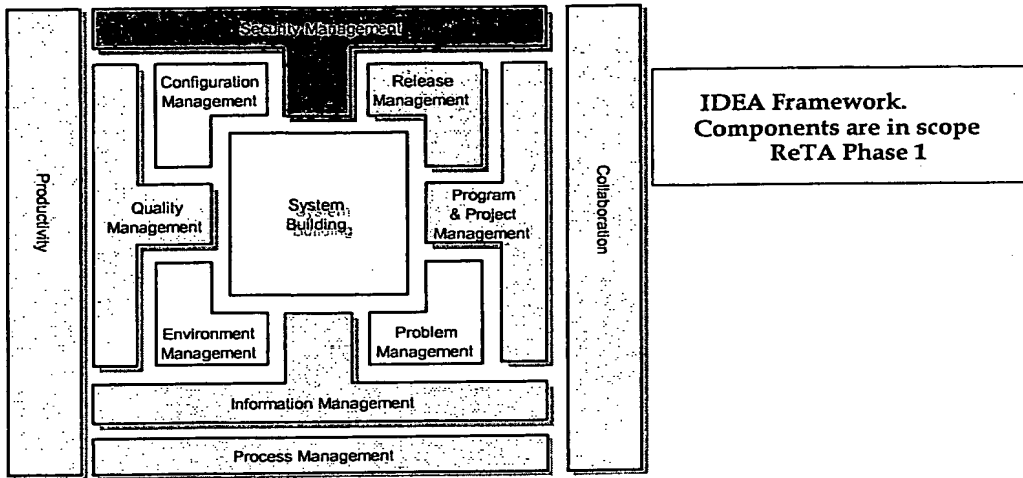


Figure 43

4400

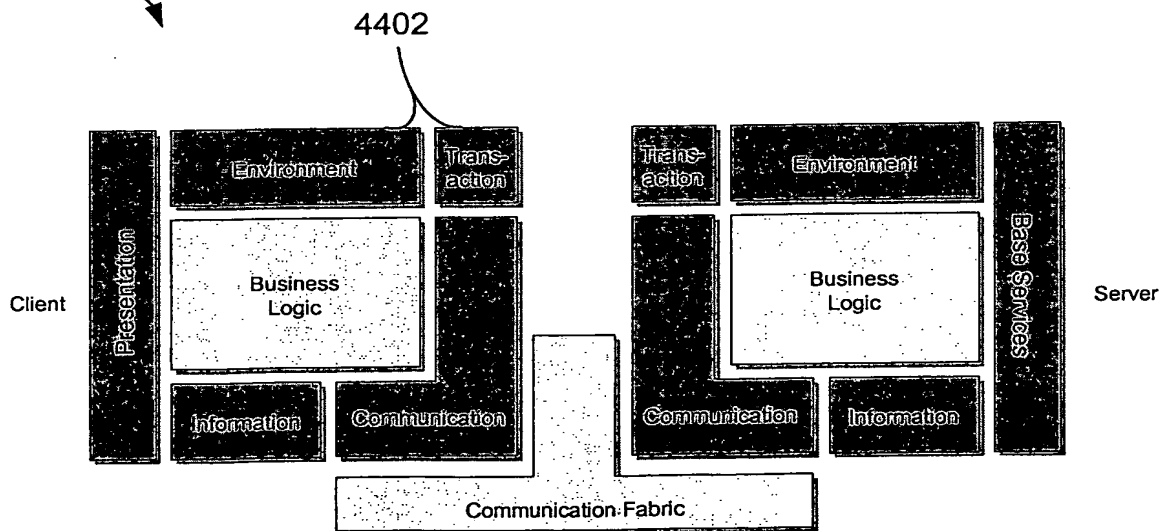


Figure 44



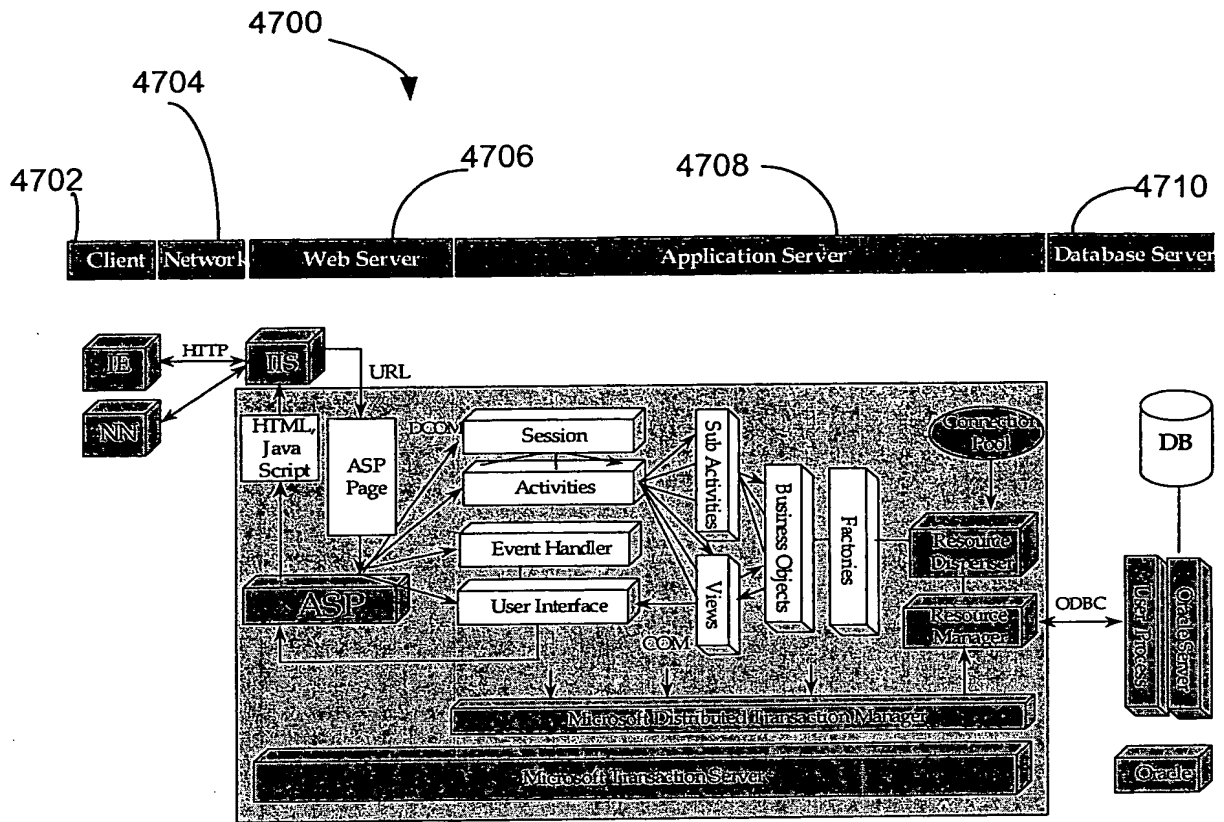


Figure 47

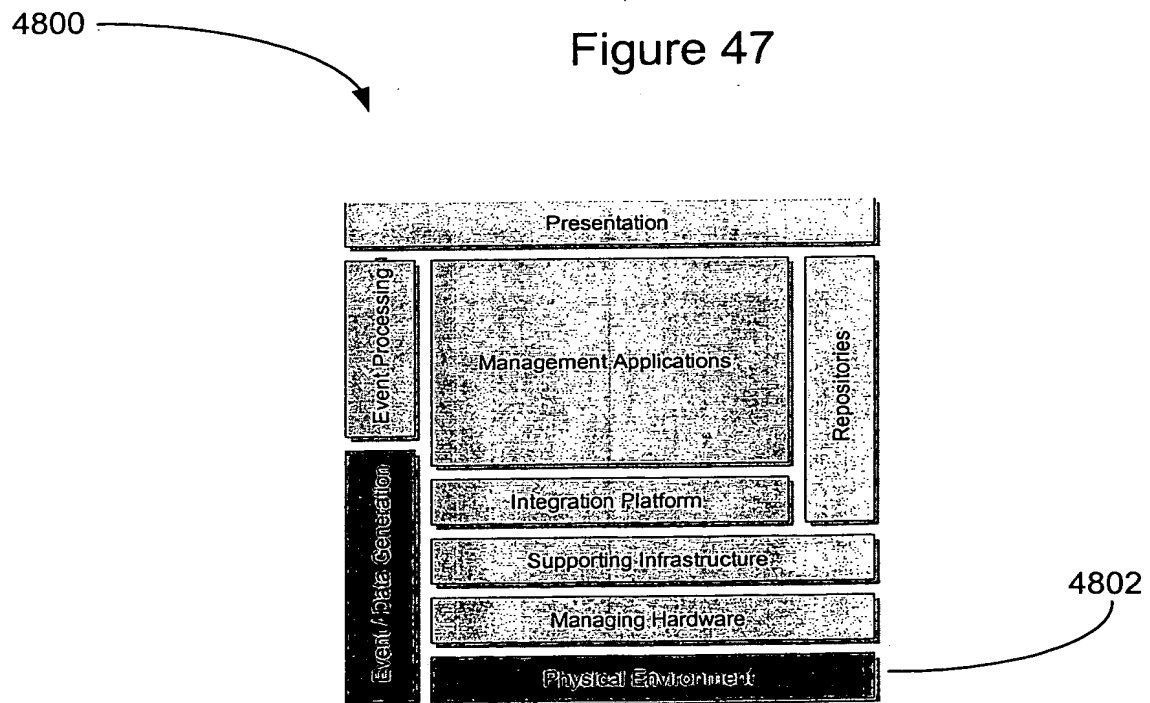


Figure 48

[illegible]

Figure 49



Figure 50



5400

5402

5404

```

    erDiagram
        T_AF_USERROLES ||--o{ T_AF_USERNAME : "has"
        T_AF_USERNAME ||--o{ T_AF_USERPREFERENCES : "has"
        T_AF_USERNAME ||--o{ T_AF_AUTHDESTINATIONPAGE : "has"
        T_AF_USERNAME ||--o{ T_AF_DESTINATIONFORACTION : "has"
        T_AF_USERNAME ||--o{ T_AF_PAGESOFACTIVITY : "has"
        T_AF_USERNAME ||--o{ T_AF_AUTHSOURCEPAGE : "has"
        T_AF_USERNAME ||--o{ T_AF_ERRORCODES : "has"
        T_AF_USERNAME ||--o{ T_AF_EVENTLOG : "has"
        T_AF_USERNAME ||--o{ T_AF_EVENTREFERENCE : "has"
        T_AF_USERNAME ||--o{ T_AF_SYSTEMPREFERENCES : "has"
        T_AF_USERNAME ||--o{ T_AF_CTMASTER : "has"
  
```

The diagram illustrates a database schema for a security system. It consists of the following tables and their attributes:

- T\_AF\_USERROLES**: ID, ROLENAME, STARTINGPAGE
- T\_AF\_USERNAME**: ID, USERNAME, USERID, ROLEID, CUSTOMERID
- T\_AF\_USERPREFERENCES**: ID, PREFERREDLANGUAGE, GRAPHICLEVEL, PREFERRED CURRENCY, CURRENTLOCATION, DATEFORMAT, SESSIONCLOCKINGREQUIRED, DEPOSIT, IMAGE SIZE, QUANTITYFLAG, CHECKSUMFLAG
- T\_AF\_AUTHDESTINATIONPAGE**: ID, CURRENTPAGE, DESTINATIONPAGE
- T\_AF\_DESTINATIONFORACTION**: ID, ACTION, ACTIVITY, CURRENTPAGE, DESTINATIONPAGE
- T\_AF\_PAGESOFACTIVITY**: ID, ACTIVITY, PAGE
- T\_AF\_CTMASTER**: NAME FRIENDLY, NAME CT, CODE ALLOW, CODE PROLOG, CODE LENGTH, DATE VALID, TIME VALID, DATE EXPIRE, TIME EXPIRE
- T\_AF\_ERRORCODES**: CODE, DISCODE
- T\_AF\_EVENTLOG**: ID, TYPE, SUBACTIVITYLABEL, METHODNAME, OBJECTNAME, ASP, CODE, SEVERITYLEVEL, CONTEXT, USERID, LASTUPDATE
- T\_AF\_EVENTREFERENCE**: ID, TYPE, CONTEXT, DESCRIPTION, USERDESCRIPTION, LANGUAGE, CODE, SEVERITYLEVEL, PERSIST
- T\_AF\_AUTHSOURCEPAGE**: ID, CURRENTPAGE, SOURCEPAGE
- T\_AF\_SYSTEMPREFERENCES**: ROOTASP

Relationships are indicated by lines with crow's foot notation. The diagram is labeled with 5400 and 5402.

Diagram illustrating a database schema with the following tables and fields:

- T\_CUSTOMER** (Table 5500):
  - SSN ID
  - CUST NAME
  - CUST AGE
  - CUST LVL
  - USERID
  - LASTUPDATE
- T\_CTLEVELS** (Table 5502):
  - CODE
  - DECODE
- T\_FEEDBACK** (Table 5502):
  - FEEDBACKID
  - ACTIVITY
  - TYPE
  - FEEDBACKTEXT
  - USERID
  - LASTUPDATE
  - T\_VCFEEDBACK
- T\_CTSTATES** (Table 5502):
  - CODE
  - DECODE
- T\_CTSALUTATION** (Table 5502):
  - CODE
  - DECODE

Relationships are indicated by lines connecting the tables:

- A line connects **T\_CTLEVELS** to **T\_CUSTOMER**.
- A line connects **T\_FEEDBACK** to **T\_CUSTOMER**.

### Figure 55





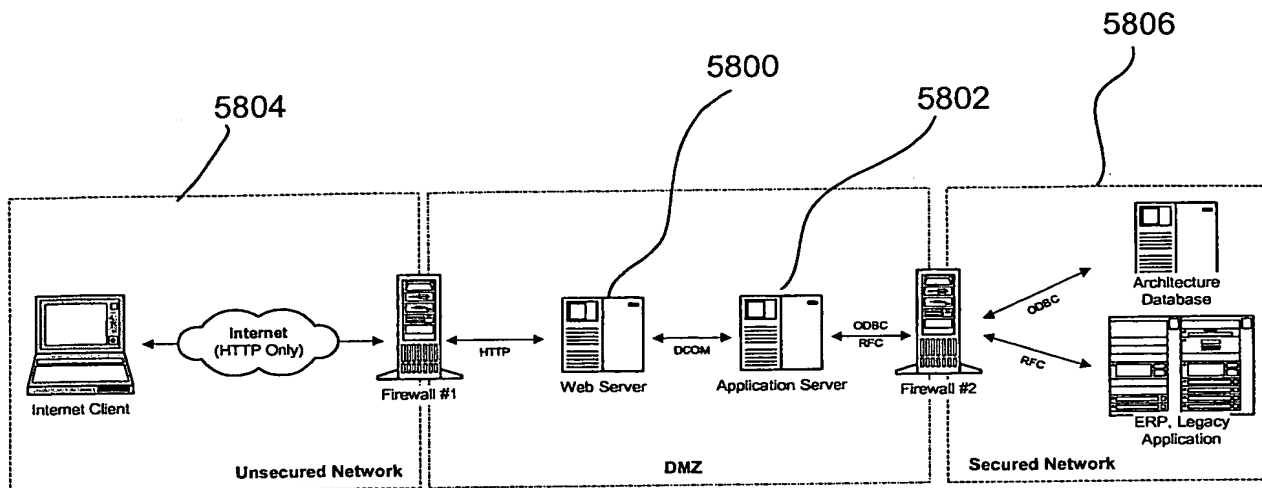


Figure 58

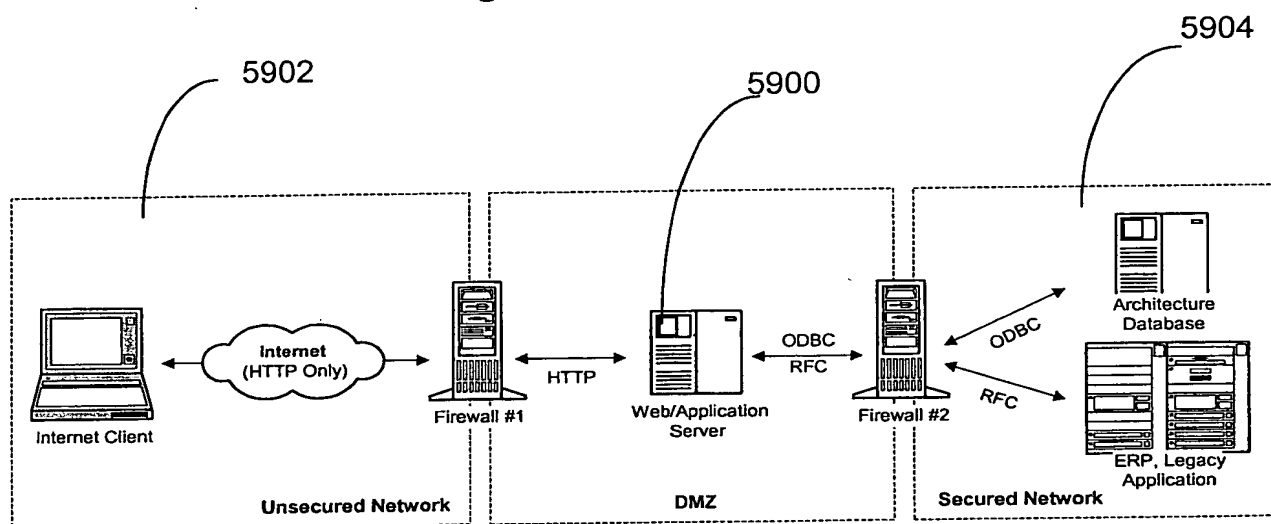


Figure 59

00220" 62896560

6000

6002

6004

6006

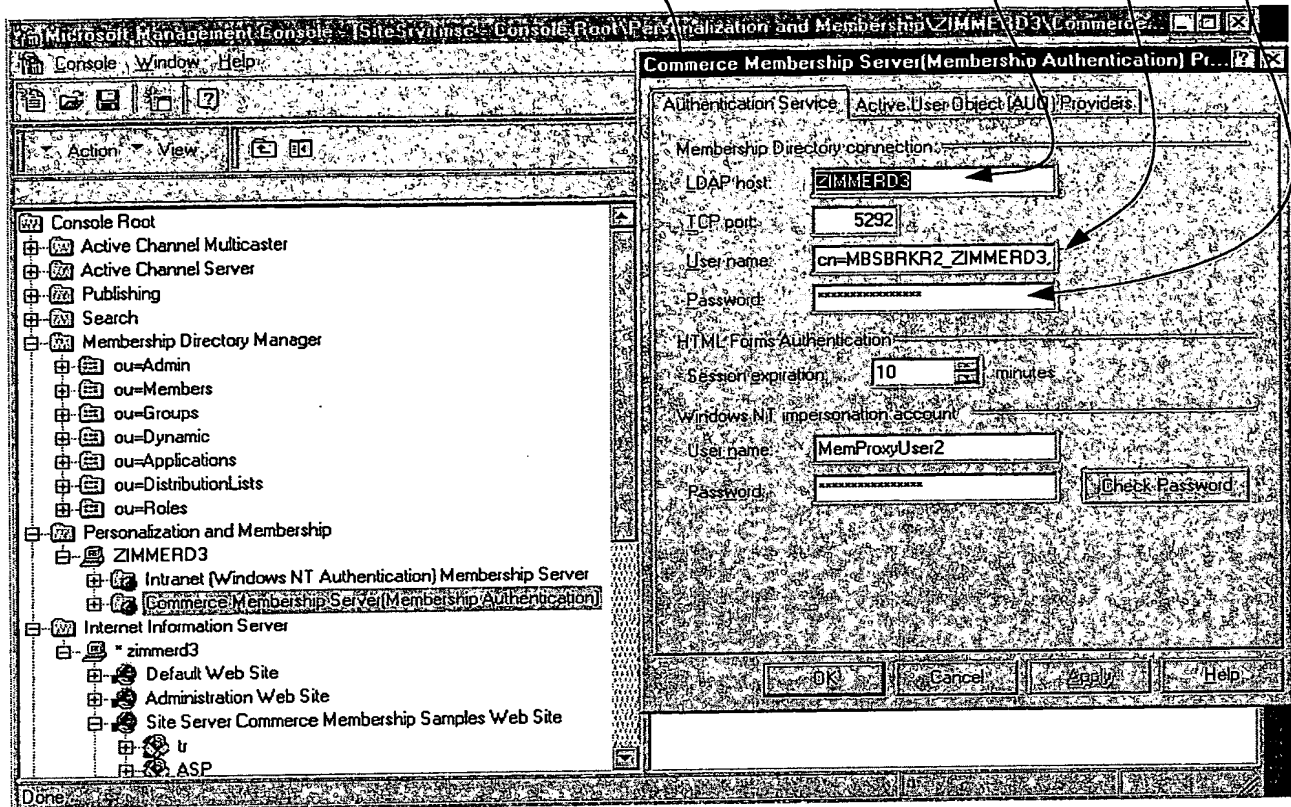


Figure 60

6102

6100

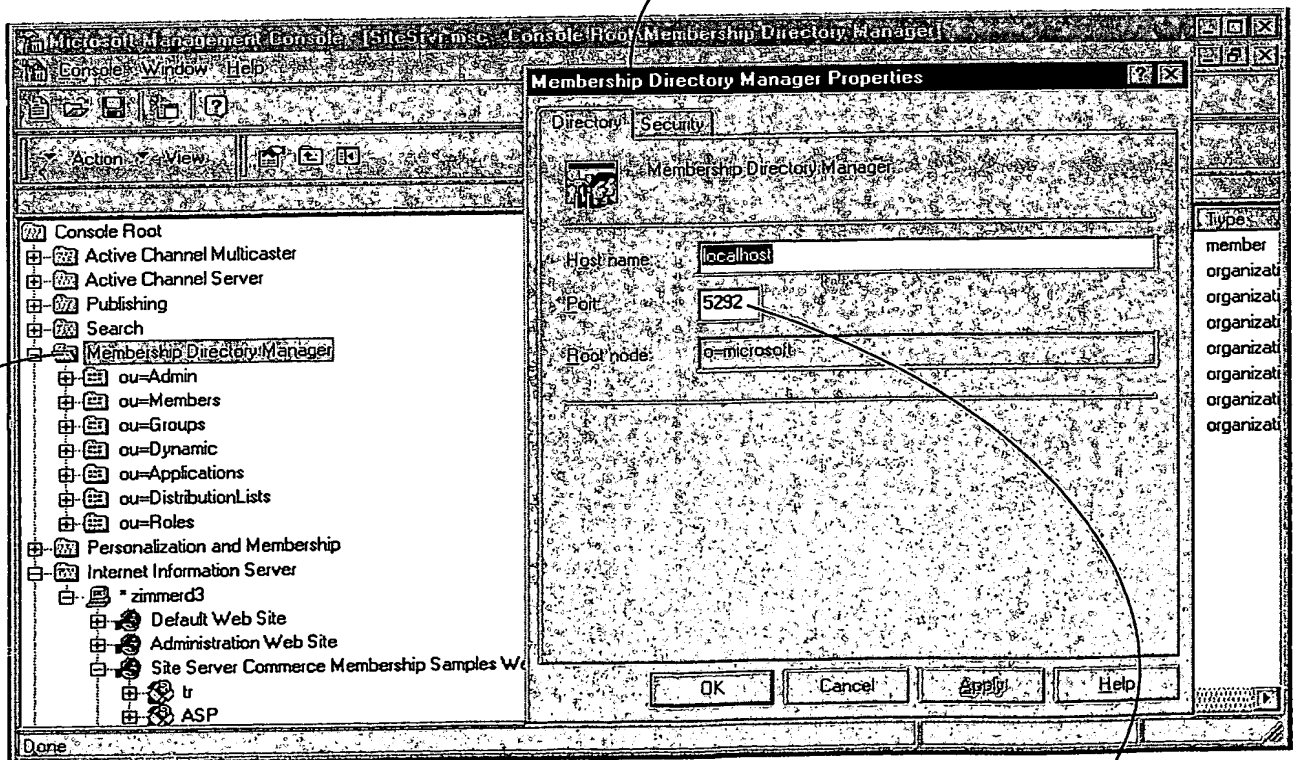


Figure 61

6104

00220-629560

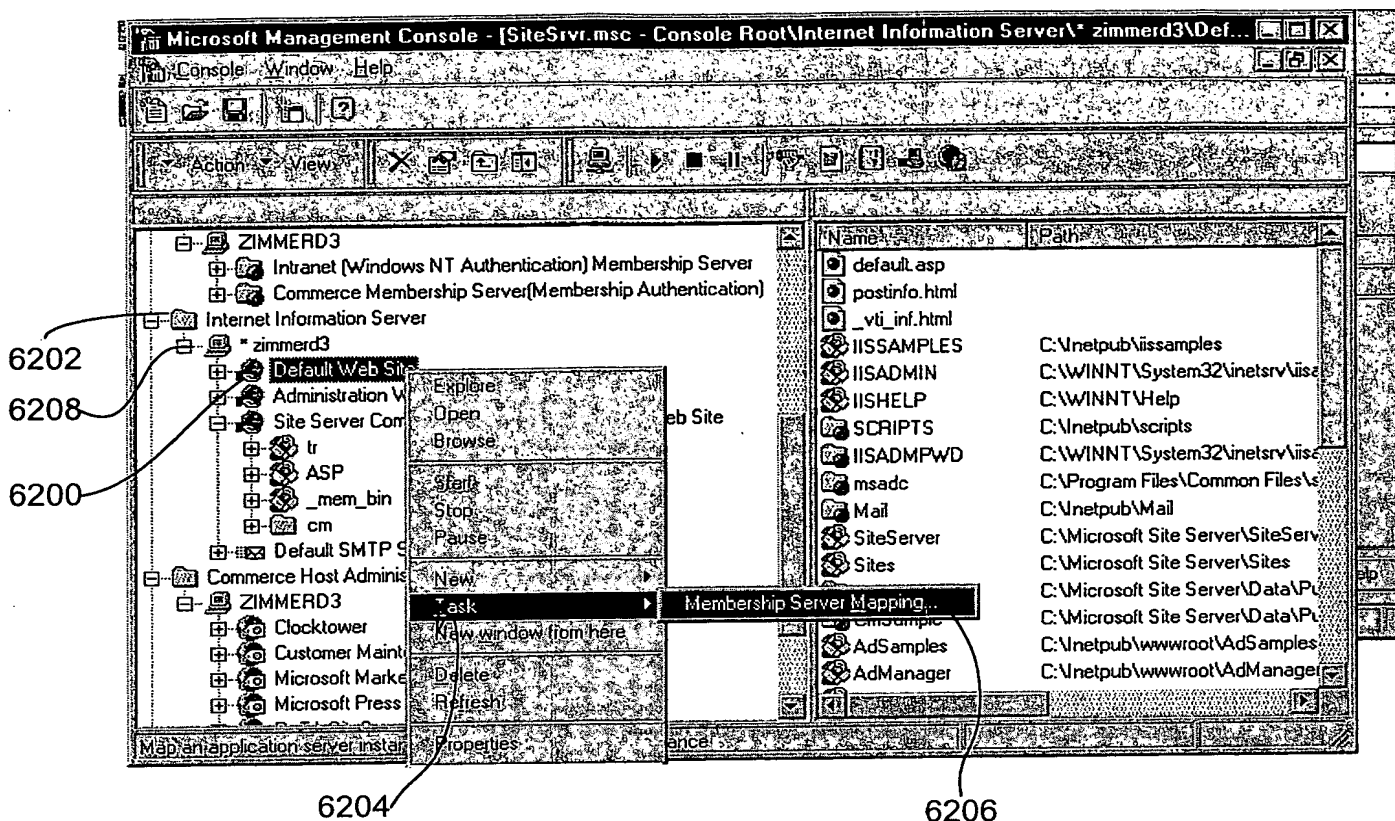


Figure 62

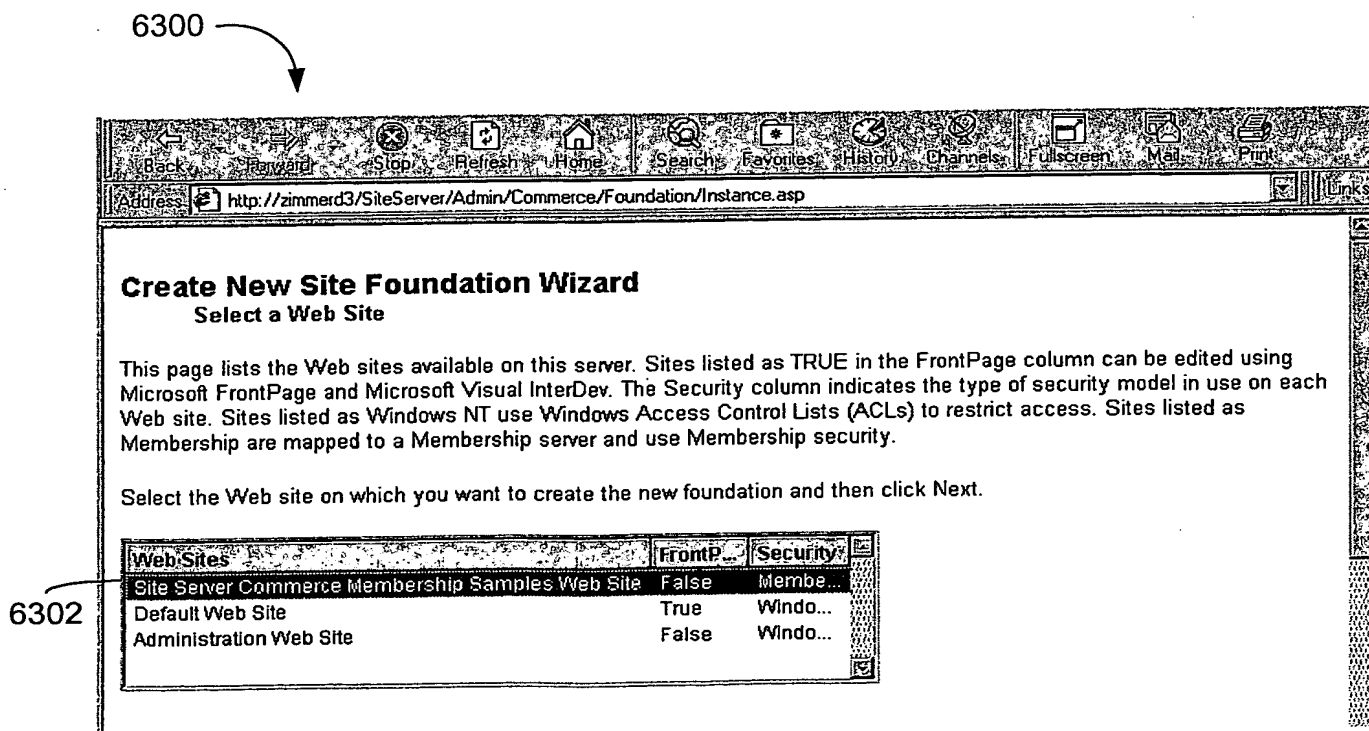


Figure 63

Exploring - C:\Microsoft Site Server\Sites\Member\cm\Member\ASP

File Edit View Tools Help

Asp

All Folders

- Microsoft Site Server
  - Bin
  - Data
  - Sites
    - Commerce
    - Member
      - cm
        - Assets
        - Closed
        - Config
        - Manager
        - Member
        - Asp

Contents of C:\Microsoft Site Server\Sites\Member\cm\Member\ASP

Name
ExamplePages

0 bytes (Disk free space: 141 GB)

6400 6402 6404

Figure 64

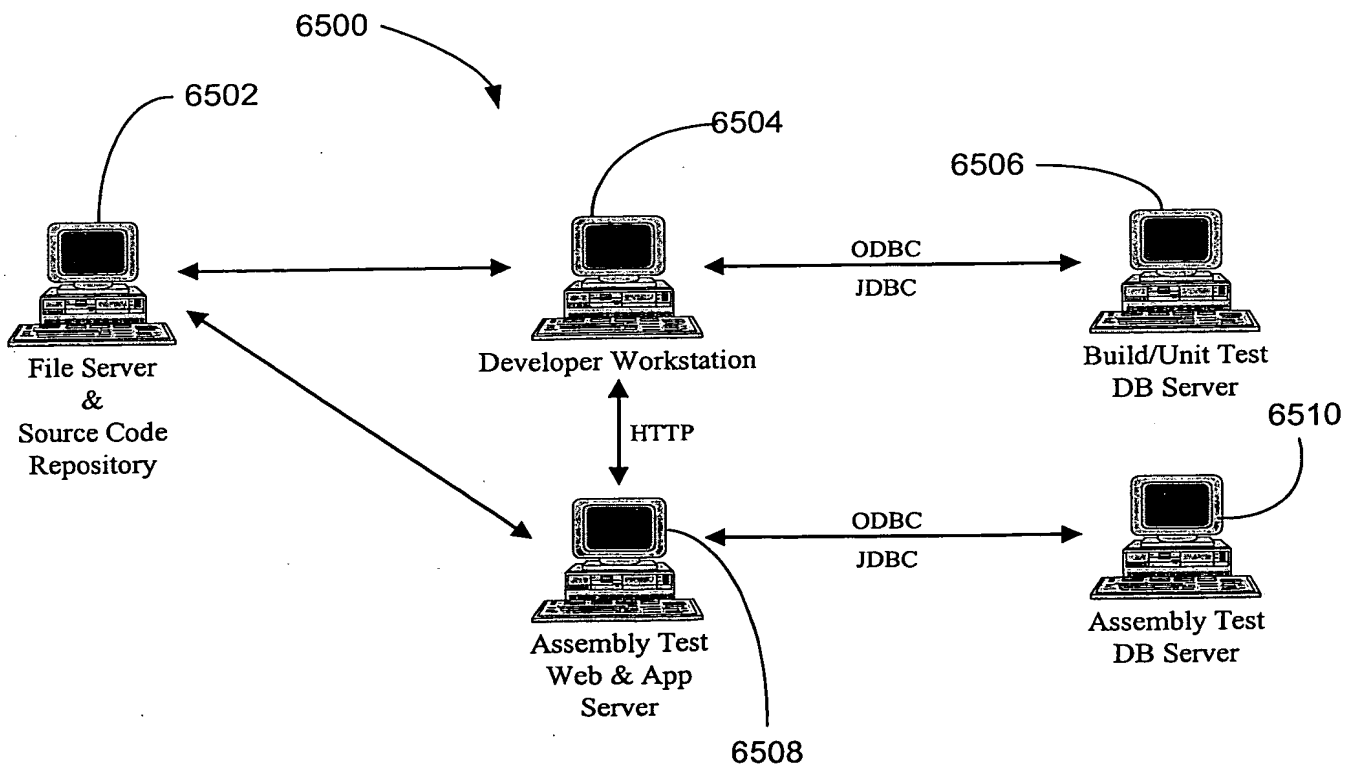


Figure 65

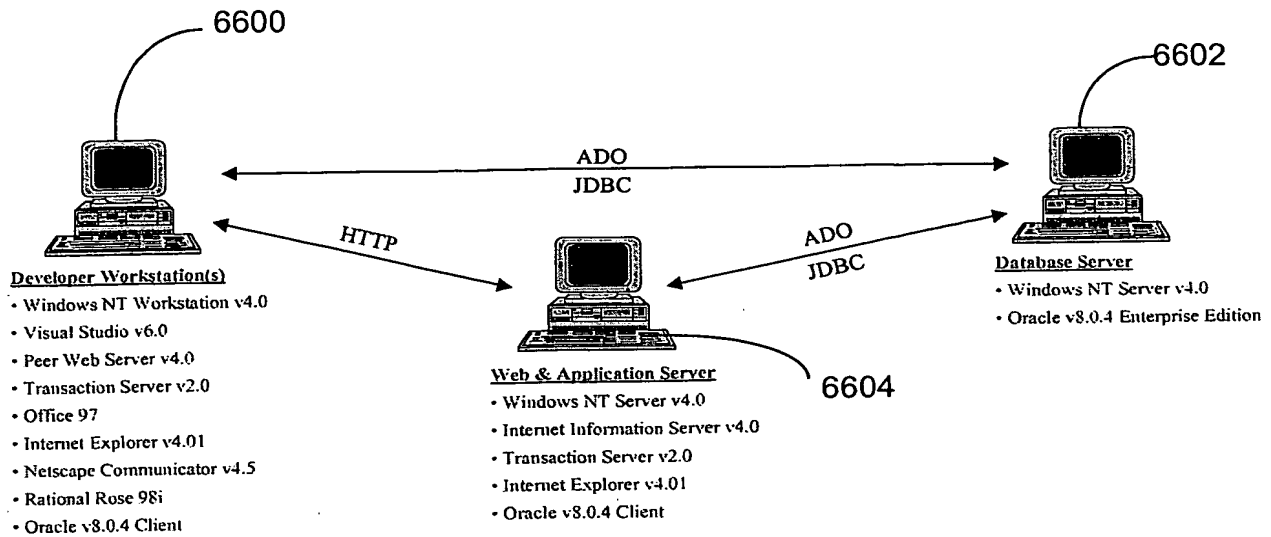


Figure 66

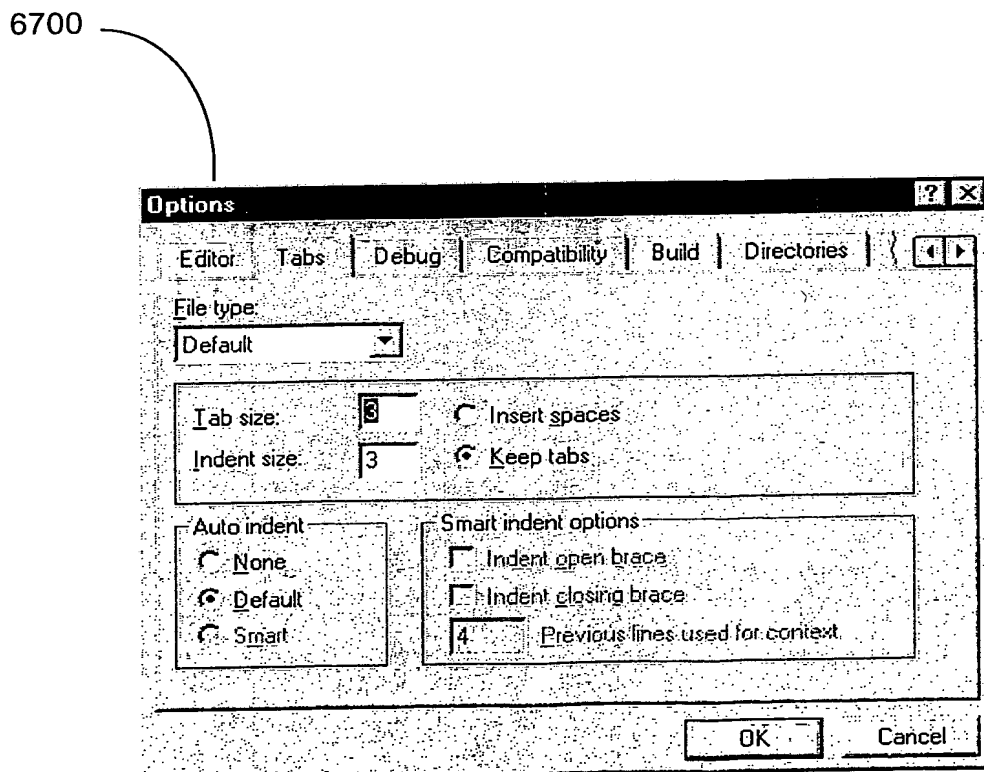


Figure 67

6802

6804

6800

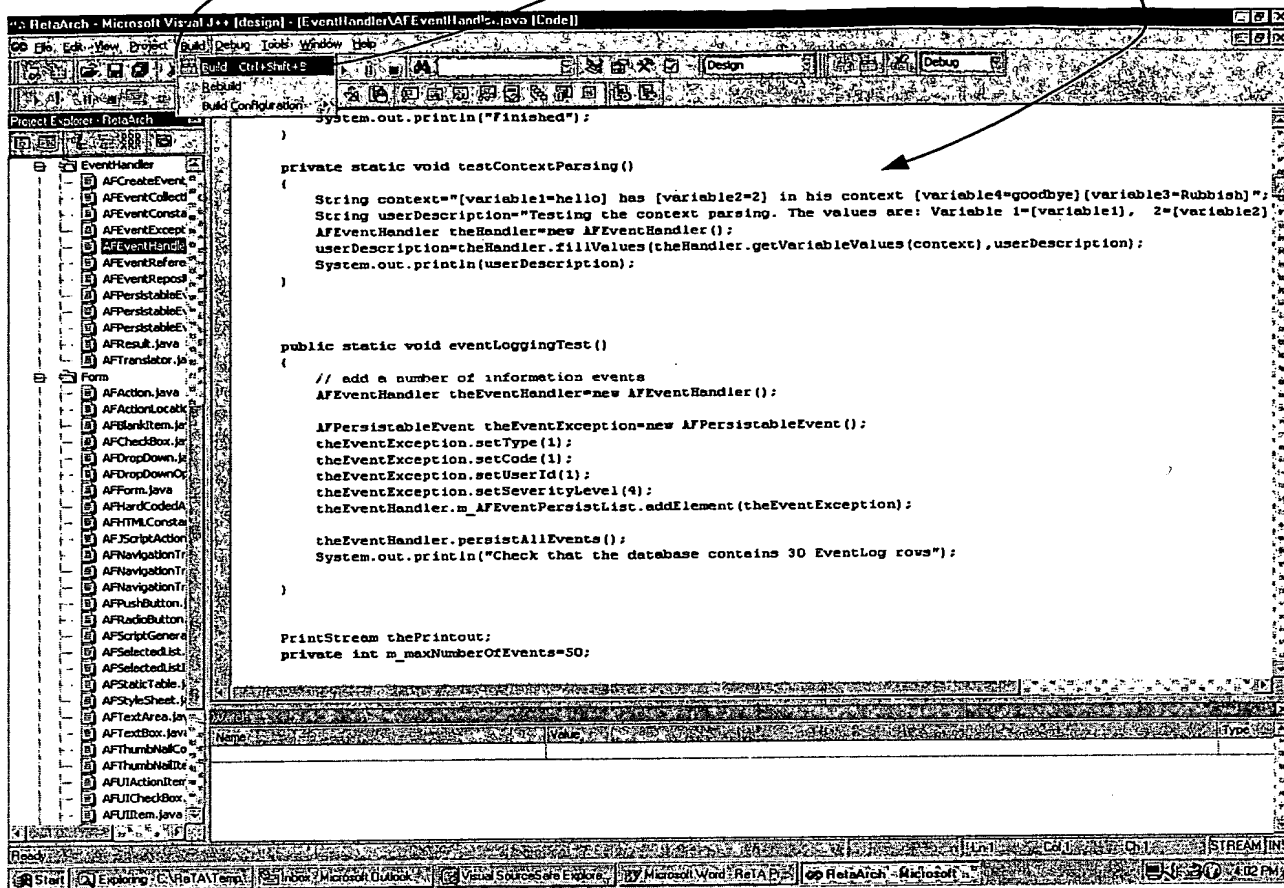


Figure 68

6900

6904

6902

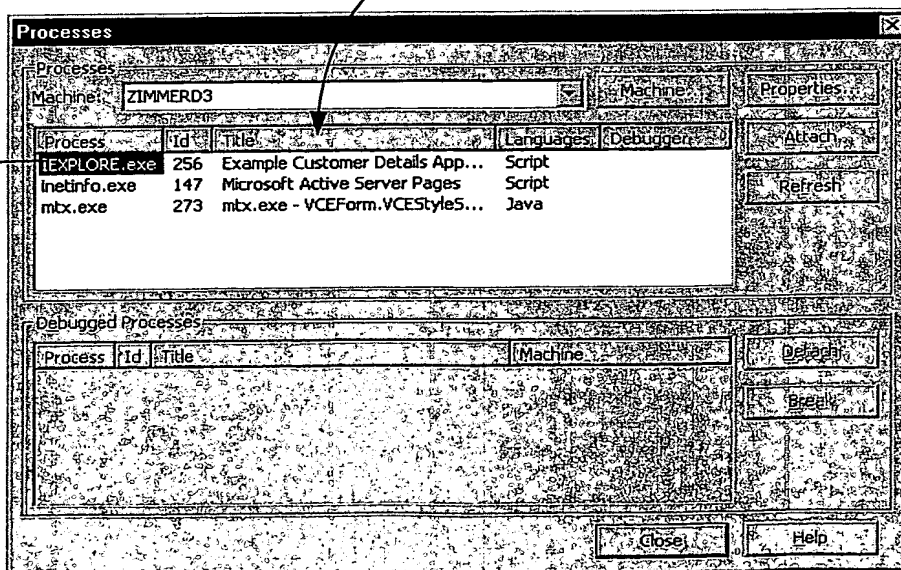
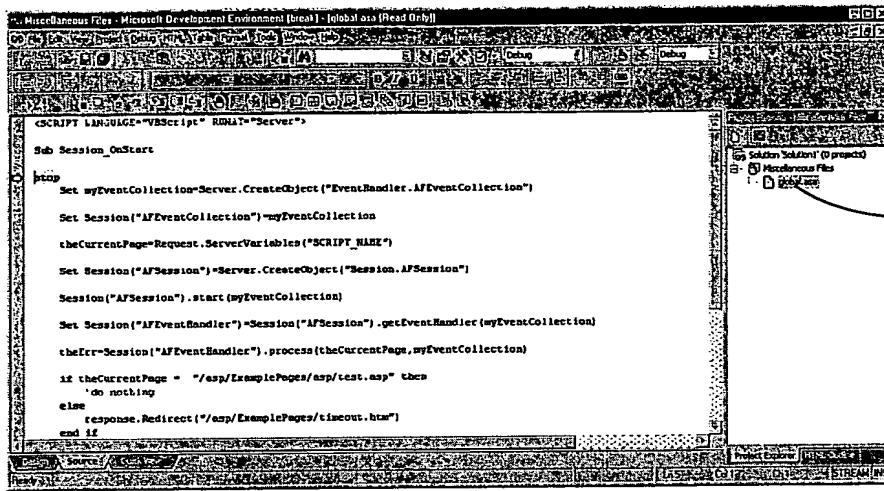


Figure 69

7000



7002

Figure 70

7100

7102

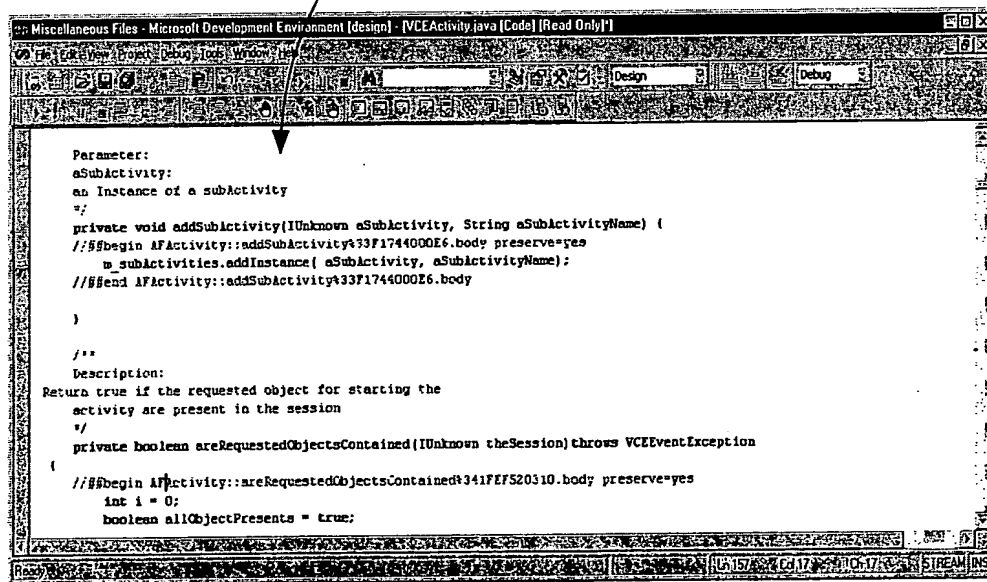


Figure 71



7200

## TESTING A PLURALITY OF SOFTWARE MODULES OF A TECHNICAL ARCHITECTURE IN A FIRST PASS

7202

## IMPLEMENTING A SOLUTION FOR THE SOFTWARE MODULES THAT ARE FOUND TO BE DEFECTS WHEN TESTED IN THE FIRST PASS

7204

**TESTING THE SOFTWARE MODULES IN A SECOND PASS TO DETERMINE WHETHER THE SOLUTIONS IMPLEMENTED IN THE FIRST PASS ARE DEFECTIVE AND FURTHER DETERMINE WHETHER THE SOLUTIONS CAUSED ADDITIONAL DEFECTS IN THE SOFTWARE MODULES**

7206

## GENERATING A SOLUTION FOR THE SOFTWARE MODULES THAT ARE FOUND TO BE DEFECTS WHEN TESTED IN THE SECOND PASS

7208

**PERFORMING TESTS ON THE SOFTWARE MODULES IN A THIRD PASS  
TO DETERMINE WHETHER THE SOLUTIONS IMPLEMENTED IN THE  
SECOND PASS ARE DEFECTIVE**

7210

Figure 72

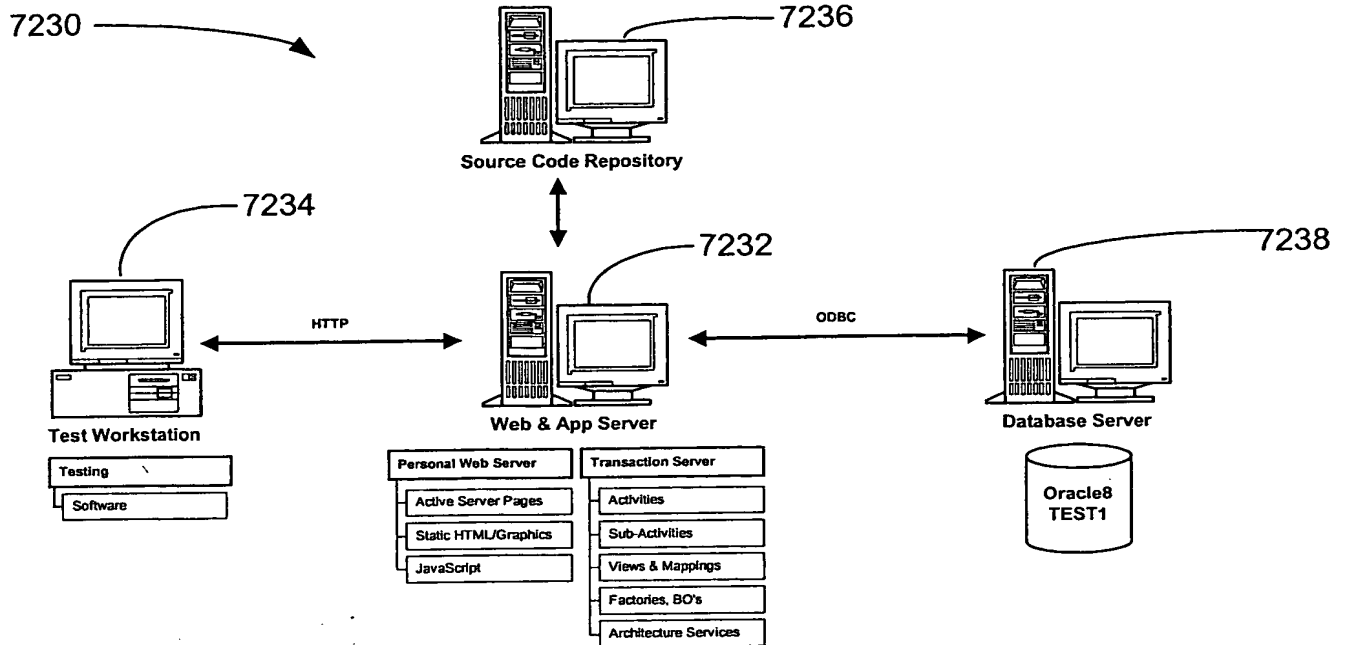


Figure 72.1

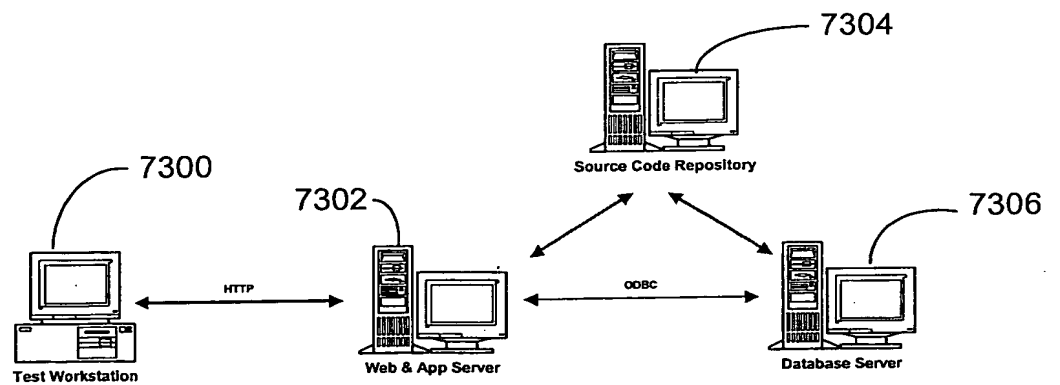


Figure 73

002220" 6289E360

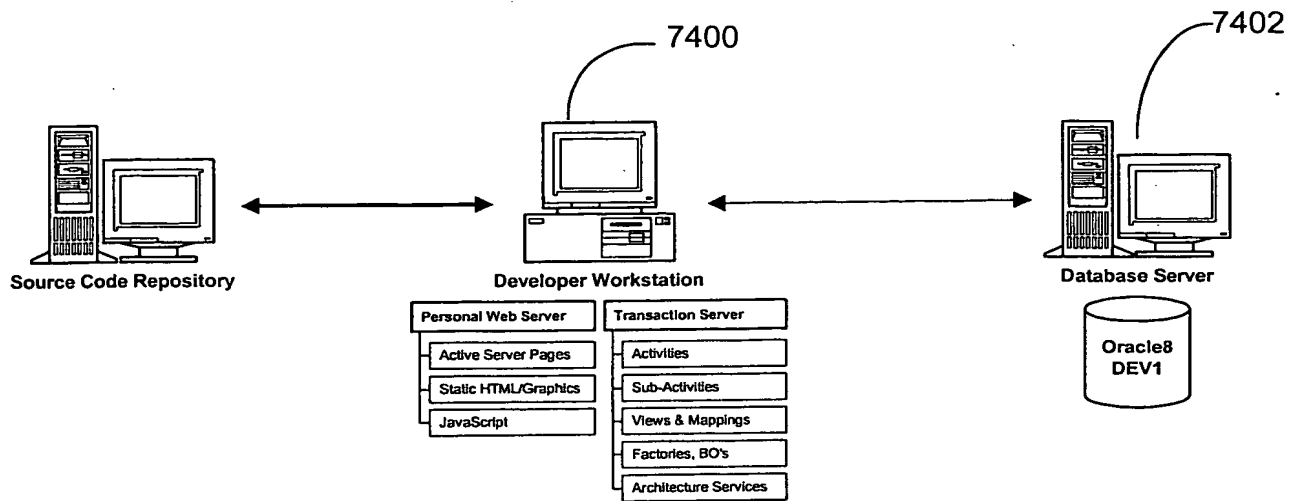


Figure 74

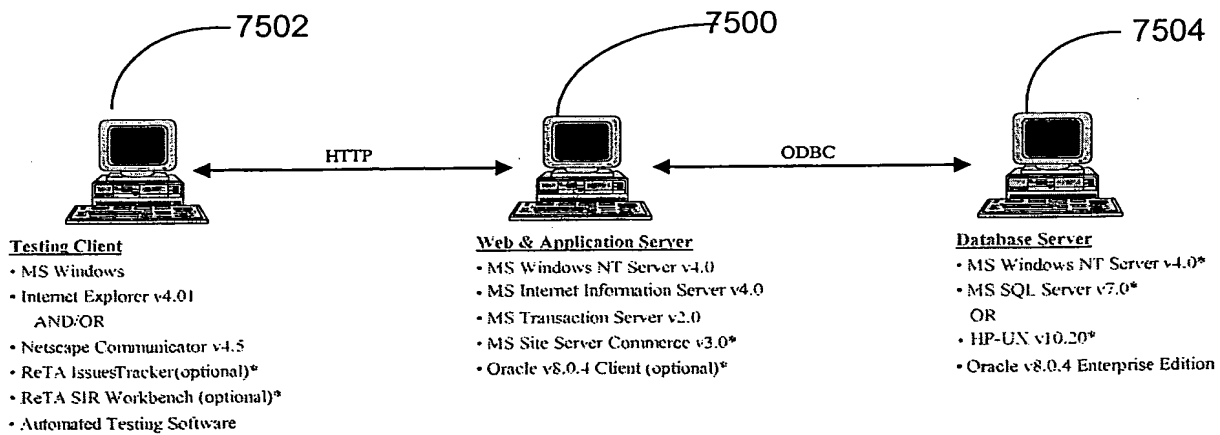


Figure 75